ELECTRONICS

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SAMSUNG

DUAL BAND Mobile Cellular Phone

SGH-2100

SERVICE *Manual*

DUAL BAND Mobile Cellular Phone

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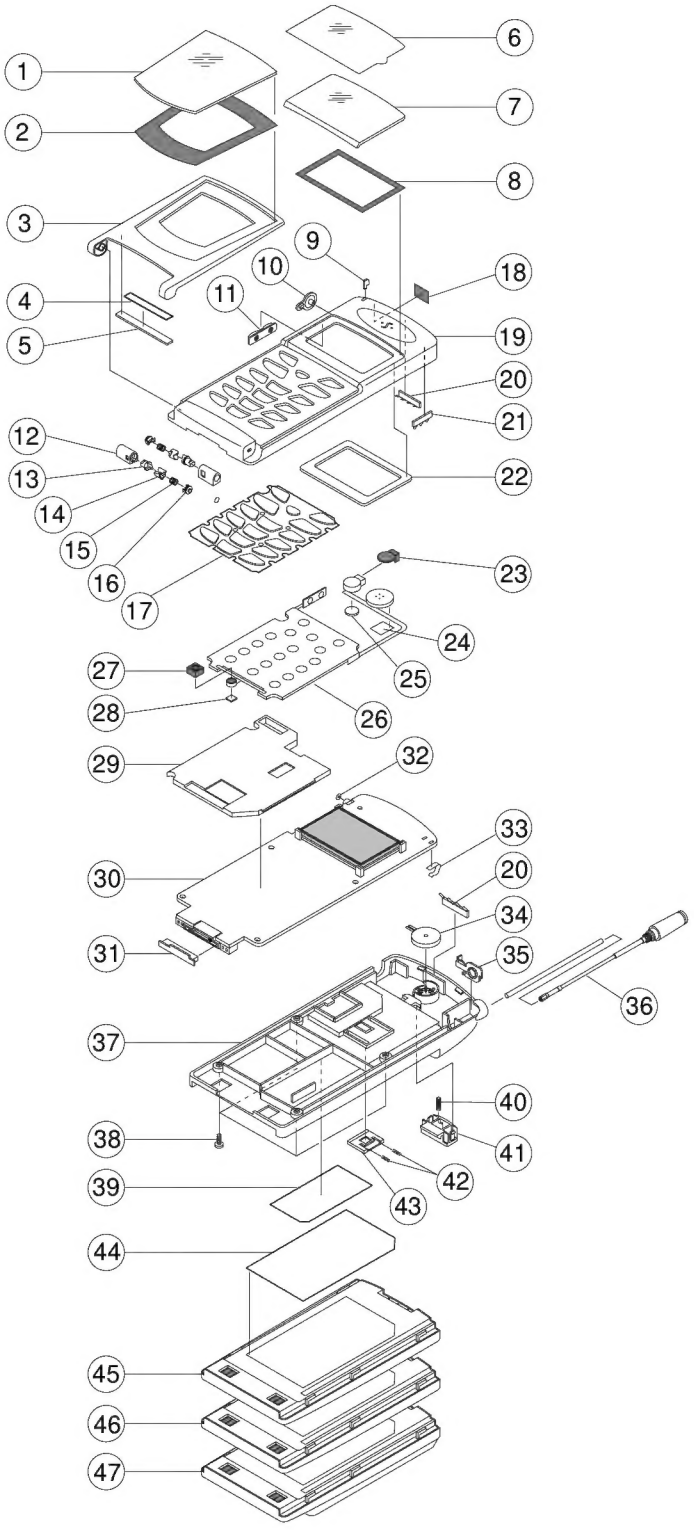
1. Exploded Views and Parts List

1-1 Main

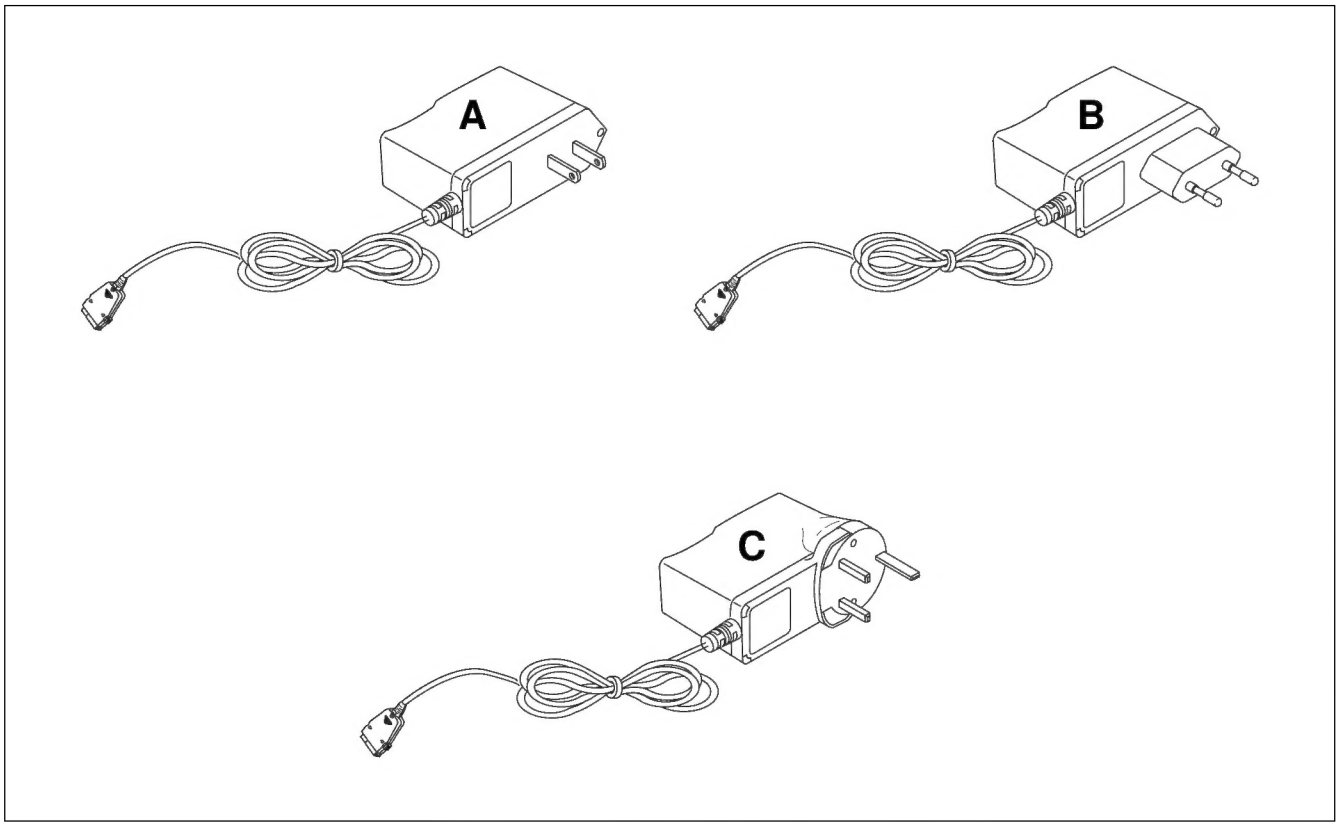


1-2 Main Parts List

NO	DESCRIPTION	SEC.CODE	Q'TY	REMARK
1	HALF-MIRROR	GH72-00274A	1	
2	TAPE-H/DUMMY	GH74-00197A	1	
3	H/FLIP	GH72-00381A	1	
4	MARGNETIC	937-312008AA	1	
5	LABEL-FLIP	GH68-11192A	1	
6	TAPE WINDOE BOHO	GH72-10001A	1	
7	WINDOW LCD	GH72-00139A	1	
8	TAPE-WINDOW	GH74-40520A	1	
9	REFLETOR LED	GH72-41576A	1	
10	COVER EAR-JACK	GH73-40726A	1	
11	KEY VOLUMN	GH73-40724A	1	
12	HINGE-HOUSING	GH72-41360A	2	
13	SHAFT-HINGE	GH72-41057A	2	
14	HINGE-CAM	GH61-80002A	2	
15	SPRING-HINGE	GH70-10680A	2	
16	HOUSING-CAP	GH72-41056A	2	
17	KEY MAIN	GH72-41756A	1	
18	CLOTH-BUZZER	GH63-20001A	1	
19	FRONT-COVER	GH72-41742A	1	
20	SHIELD STRIP(C)	GH71-10641A	2	
21	SHIELD STRIP(B)	GH71-10640A	1	
22	SPONGE-LCD	GH74-40521A	1	
23	RUBBER-BUZZER	GH73-40723A	1	
24	SUPPORT SPK	GH74-00131A		
25	BACKUP TAPE	GH74-40518A	1	
26	KEY PCB	GH59-00025A	1	
27	HOLDER MIC	GH73-40641A	1	
28	SPK SPONGE	GH74-10604A	1	
29	SHIELD-FRAME	GH72-41753A	1	
30	MAIN PCB	GH92-00740A	1	
31	COVER CONNECTOR	GH73-40686A	1	
32	JACK-COVER	GH73-10514A	1	
33	ANTENNA CON.	GH71-00020A	1	
34	VIBRATOR	GH31-10004A	1	
35	ANTENNA BRK	GH71-00021A	1	
36	ANT	GH42-00012A	1	
37	REAR-COVER	GH72-417423A	1	
38	SCREW-MACHINE	6001-001046	4	

NO	DESCRIPTION	SEC.CODE	Q'TY	REMARK
39	LABEL MAIN	GH68-00352A	1	
40	SPRING-LOCKER	GH70-10516A	1	
41	LOCKER-MAIN	GH72-41373A	1	
42	SPRING-SIM	GH70-00006A	2	
43	COVER-SIM	GH72-00088A	1	
45	BATTERY SLIM	GH43-00029A		
46	BATTERY STD	GH43-00027A		
47	BATTERY LONG	GH43-00028A		

1-3 Travel Adaptor

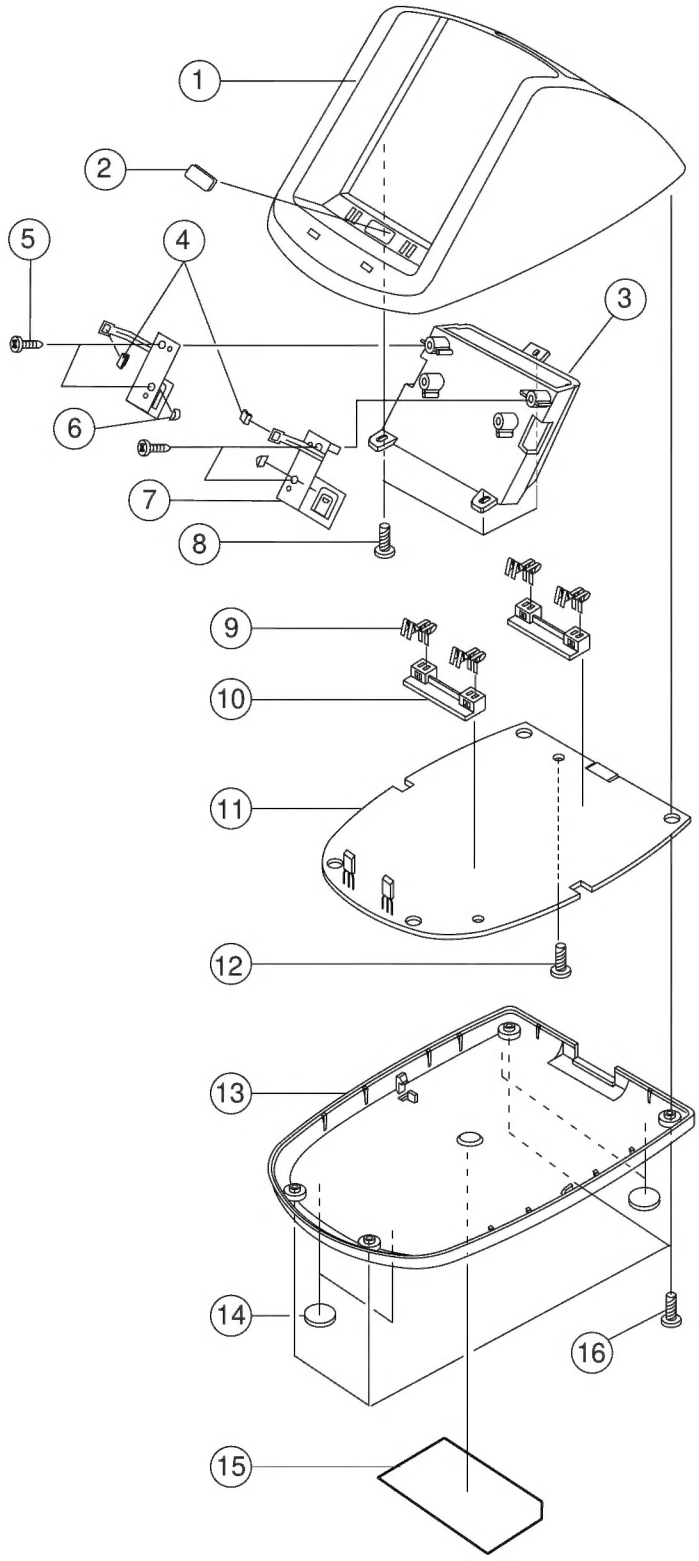


1-4 Travel Adaptor Parts List

TYPE	SEC CODE	REMARK
A	GH96-01143A	CHINA
B	GH96-01146A	EUROPE
C	GH96-01095A	UNITED KINGDOM

1-5 Desk Top Charger

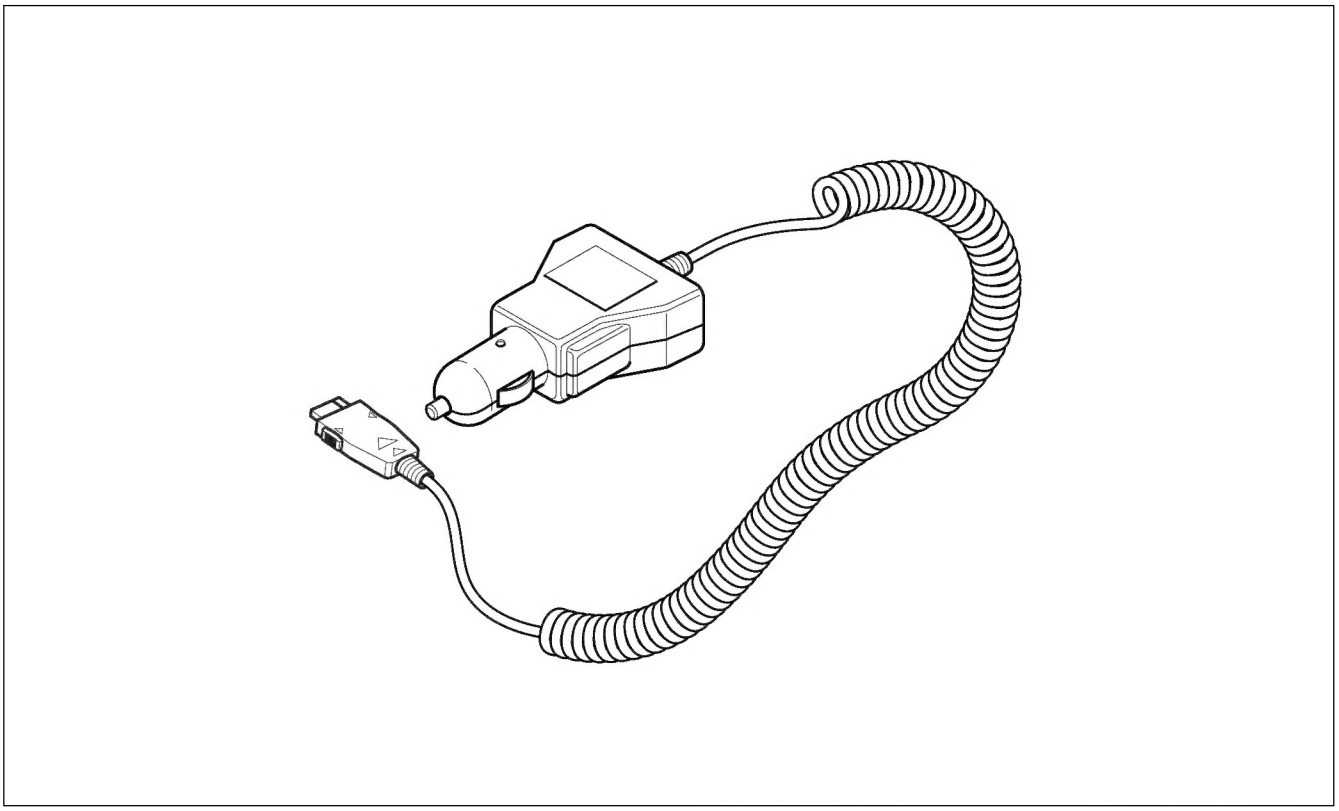
SEC CODE : GH44-00046A



1-6 Desk Top Charger Parts List

NO	DESCRIPTION	SEC.CODE	Q'TY	REMARK
1	UPPER-CASE		1	
2	GATE-LABEL		1	
3	BATTERY-HOUSING		1	
4	HANDY-LOCKER		2	
5	SCREW-TAPPING		4	
6	BATTERY-LOCKER		2	
7	HANGER-SPRING(R), (L)		1, 1	
8	SCREW-TAPPING		3	
9	CONTACT-PLATE		8	
10	CONTACT-HOUSING		2	
11	PCB		1	
12	SCREW-TAPPING		1	
13	LOWER-CASE		1	
14	FOOT-RUBBER		4	
15	LABEL NAME		1	
16	SCREW-TAPPING		4	

1-7 Ciger Light Adaptor

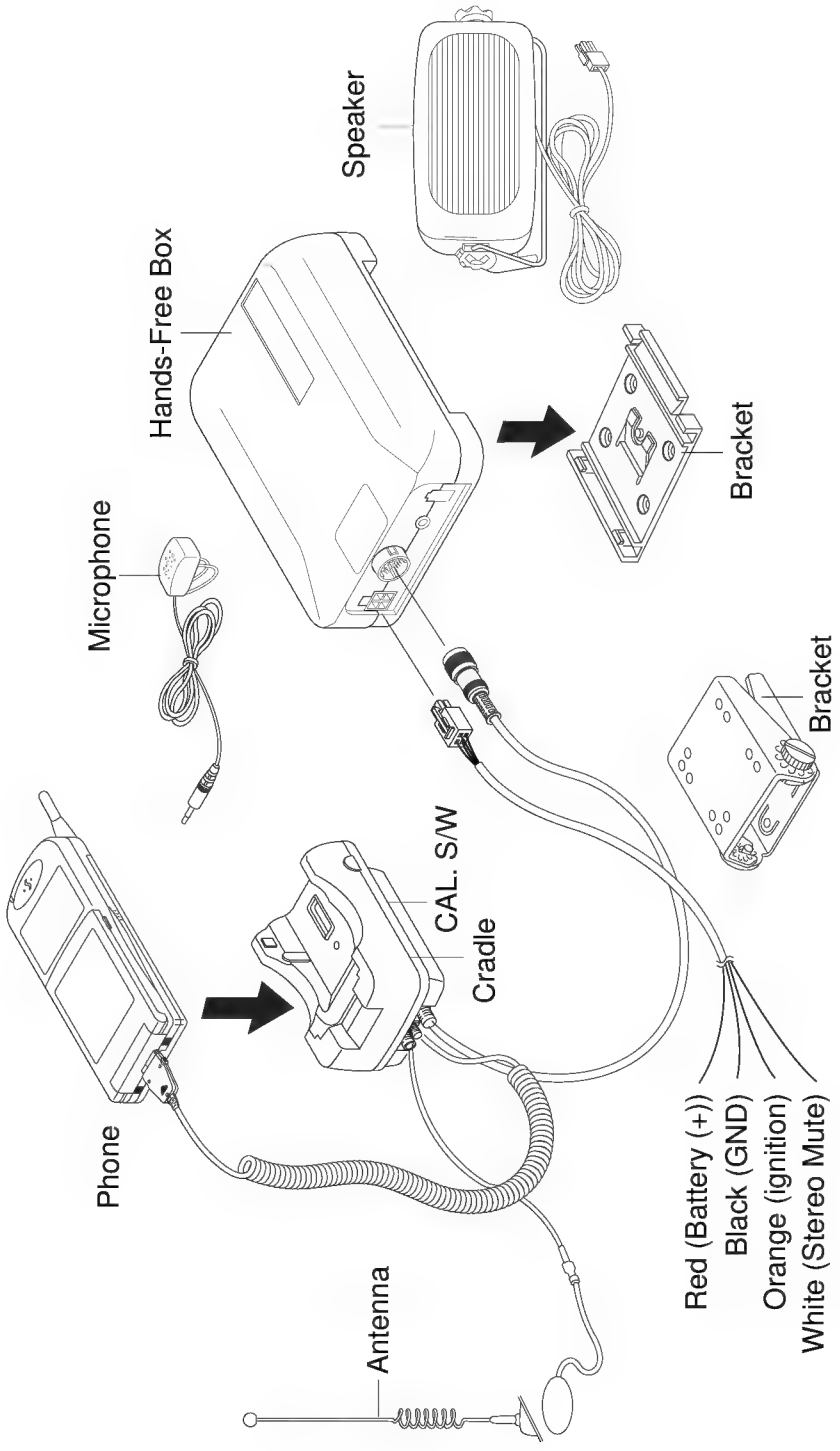


1-8 Ciger Light Adaptor Parts List

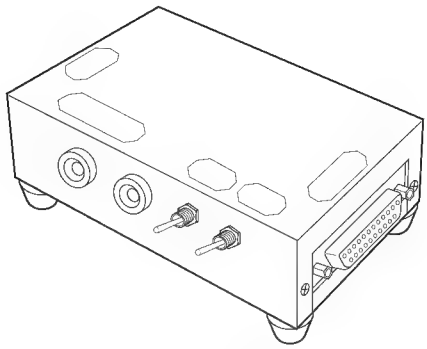
DESCRIPTION	SEC CODE	REMARK
Ciger Light Adaptor Code	GH44-00040A	BLACK

1-9 Hands Free Kit

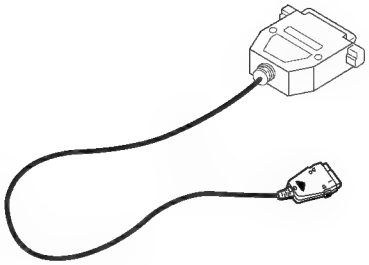
SEC CODE : GH96-00800A



1-10 Test Zig

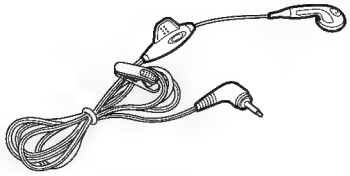


TEST JIG	GH80-10508A



DATA CABLE	GH39-30532A

1-11 Earphone



EARPHONE	GH96-00820A

2 Electrical Parts List

2-1 Main Parts List

LOCATION	SEC.CODE	DESCRIPTIONS
D401,D801	0401-001033	MCL4154,25V,200mA,M-MELF,TP
D253,D255,D808	0404-001044	UPS5817,20V,1A,SMD,TP
D400	0404-001054	HSMS-2805,70V,15mA,SOT-143,TP
D600	0405-001051	SMV1249,4.7V,50NA,SOT-23,TP
D176,D177	0406-001051	SMS05C,6V,300W,SOT-23-6
D252	0407-001002	DAN222,80V,300mA,CA2-3,EM3,TP
D901,D902	0407-001006	DA221,20V,100mA,C2-3,EM3,TR
D251	0407-001007	UMN1,80V,25mA,CA4-2,UM5,TR
Q152,Q950,Q951	0501-002011	2SD2114K,NPN,200mW,SOT-23,TP,8
Q300	0501-002037	BFP405,NPN,55mW,SOT-343,TP,50-
Q601,Q604	0501-002196	BFS17W,NPN,280mW,SOT-323,TP,20
U307	0501-002205	BCR400W,NPN,-,SOT-343,TP,-
Q151,Q153	0504-000167	RN1102,NPN,100MW,10K/10K,SSM,TP
Q255,Q256,Q257	0504-000168	RN1104,NPN,100MW,47K/47K,SSM,TP
Q500	0505-000110	2N7002,N,60V,115mA,5ohm,200mW,
U501,U502	0505-001131	TP0101T,P,-12V,-500mA,690mohm,
Q957	0505-001332	FDG6301,N,25V,0.22A,4OHM,.3W,SC70-6
Q600	0506-000173	BFS480,NPN,2,80mW,SOT-363,TP,3
U128,U252,U302,U303	0506-001004	UMC5N,NPN/PNP,2,50V,-,-100mA,3
U400,U403,U412,U813	0506-001004	UMC5N,NPN/PNP,2,50V,-,-100mA,3
LED100	0601-000276	CHIP,Y/GRN,1.6x2.0mm,570nm
U902,U903	0801-000022	7S00,NAND GATE,SOP,5P,49MIL,SINGLE,TP,PLASTIC,-,-,-,-40TO+85C,200MW,-,25MA,-,-
U900,U901,U904,U906	0801-000794	7S08,AND GATE,SOT-25,5P,63MIL,
U905	0801-002345	7S04FU,INVERTER,SOP,5P,-,-,TP,
U413,U414	0801-002349	7S66,BILATERAL SWITCH,SOP,5P,5
U962,U963	1001-001088	MAX4544EUT-T,-,SOT-23,6P,-,SINGLE,13V,-40TO+85C,PLASTIC,571MW,60 OHM,75NS,100NS,
U203	1103-001090	24C128,16Kx8BIT,SOP,8P,150MIL,
U105	1106-001272	4MBIT,TSOP,32P,813MIL,100NS,3V,-,PLASTIC,-40TO+85C,15UA,CMOS,-
U103	1107-001062	1Mx8BIT,SON,46P,-,100n
U104	1107-001158	1MX16BIT,SOP,46P,90MIL,120NS,3V,-,PLASTIC,-40TO+85CC,5UA,CMOS,-
U406	1201-001018	7131,SOT-23,5P,-,SINGLE,70dB,P
U127	1201-001212	925,TSSOP,16P,150MIL,DUAL,200MV,PLASTIC,14V,-,-40TO+125C,80DB,1.3V/US,1NA,15NA,3
U604	1201-001248	0916,SOT-143,4P,-,-,2.7V,-,6Vd
U402	1201-001299	RF-K,8P,-,SINGLE,-,-,8V,
U408	1201-001411	RF-K,5P,-,-,-,MODULE,8V,3W,-30TO+100C,-,-,-,-,-
U960	1202-001022	75W56,SSOP,8P,110MIL,DUAL,7V,C
U801,U803,U805,U806	1203-001285	5205,SOT-23,5P,150MIL,PLASTIC,
U810,U811	1203-001285	5205,SOT-23,5P,150MIL,PLASTIC,

LOCATION	SEC.CODE	DESCRIPTIONS
U809	1203-001511	809,SOT-23,3P,-,PLASTIC,0.3/6.
U253	1203-001515	SSOP,16P,150MIL,PLASTIC,3
U804	1203-001592	1015,SOT-23A-5,5P,59MIL,PLASTI
U812	1203-001702	SOP,10P,112MIL,PLASTIC,2/5.5V,444MW,-40TO+85C,220MA,1.3V,TP
U102	1203-001740	1555,SOP,16P,150MIL,PLASTIC,-0.3/12V,-,-0TO+70C,20MA,4.75/5.25V,ST
U301	1204-001006	SOP,20P,205MIL,PLASTIC,3
U300,U305	1205-001307	SOP,16P,197MIL,PLASTIC
U200	1205-001327	QFP,144P,14MIL,PLAST
U950	1205-001697	TQFP,80P,472MIL,PLASTIC,3V,-,-,TR,VLSI
U202	1206-001009	RS5C372A,SOP,8P,173MIL,PLASTIC
U603	1209-001220	SOP,20,173MIL,PLASTIC,
U500	1209-001233	SSOP,28P,-,PLASTIC,5.5V,-,-20TO+85C,TP
TH1	1404-001005	47Kohm,5%,4050K,2.0mW/C,TP
D179	1405-001018	14V,-,1.6x0.8mm,TP
D103,D104,D819	1405-001019	5.6V,-,1.6x0.8mm,TP
D101,D102	1405-001072	5V,20A,1.6X0.8X0.9MM,TP
R113,R114	2007-000072	47ohm,5%,1/16W,DA,TP,1608
R105,R129,R135,R163	2007-000138	100ohm,5%,1/16W,DA,TP,1005
R177,R178,R179,R182	2007-000138	100ohm,5%,1/16W,DA,TP,1005
R183,R185,R186,R187	2007-000138	100ohm,5%,1/16W,DA,TP,1005
R188,R621,R653,R970	2007-000138	100ohm,5%,1/16W,DA,TP,1005
R644	2007-000139	220ohm,5%,1/16W,DA,TP,1005
R160,R220,R221,R529	2007-000140	1Kohm,5%,1/16W,DA,TP,1005
R611,R646,R811,R951	2007-000140	1Kohm,5%,1/16W,DA,TP,1005
R954	2007-000140	1Kohm,5%,1/16W,DA,TP,1005
R640	2007-000141	2.2Kohm,5%,1/16W,DA,TP,1005
R309,R609	2007-000142	2.7Kohm,5%,1/16W,DA,TP,1005
R162,R351	2007-000143	4.7Kohm,5%,1/16W,DA,TP,1005
R606,R628	2007-000145	6.2Kohm,5%,1/16W,DA,TP,1005
R603	2007-000146	6.8Kohm,5%,1/16W,DA,TP,1005
R104,R152,R205,R210	2007-000148	10Kohm,5%,1/16W,DA,TP,1005
R232,R235,R238,R253	2007-000148	10Kohm,5%,1/16W,DA,TP,1005
R256,R363,R418,R419	2007-000148	10Kohm,5%,1/16W,DA,TP,1005
R605,R630,R637,R906	2007-000148	10Kohm,5%,1/16W,DA,TP,1005
R907,R952,R962,R963	2007-000148	10Kohm,5%,1/16W,DA,TP,1005
R984,R985	2007-000148	10Kohm,5%,1/16W,DA,TP,1005
R300	2007-000152	20Kohm,5%,1/16W,DA,TP,1005
R622	2007-000153	22Kohm,5%,1/16W,DA,TP,1005
R126,R208,R218,R219	2007-000157	47Kohm,5%,1/16W,DA,TP,1005
R352,R353	2007-000157	47Kohm,5%,1/16W,DA,TP,1005
R257	2007-000159	56Kohm,5%,1/16W,DA,TP,1005
R100,R101,R102,R151	2007-000162	100Kohm,5%,1/16W,DA,TP,1005

LOCATION	SEC.CODE	DESCRIPTIONS
R153,R209,R212,R213	2007-000162	100Kohm,5%,1/16W,DA,TP,1005
R214,R215,R222,R231	2007-000162	100Kohm,5%,1/16W,DA,TP,1005
R251,R252,R254,R255	2007-000162	100Kohm,5%,1/16W,DA,TP,1005
R263,R264,R528,R812	2007-000162	100Kohm,5%,1/16W,DA,TP,1005
R972,R980	2007-000162	100Kohm,5%,1/16W,DA,TP,1005
R610,R639	2007-000164	150Kohm,5%,1/16W,DA,TP,1005
R131,R184,R326,R327	2007-000171	0ohm,5%,1/16W,DA,TP,1005
R361,R505,R531,R624	2007-000171	0ohm,5%,1/16W,DA,TP,1005
R631,R647,R800,R809	2007-000171	0ohm,5%,1/16W,DA,TP,1005
R828,R955,R968,R978	2007-000171	0ohm,5%,1/16W,DA,TP,1005
R986,L312	2007-000171	0ohm,5%,1/16W,DA,TP,1005
R180,R181,R308,R500	2007-000172	10ohm,5%,1/16W,DA,TP,1005
R501,R502,R503,R504	2007-000172	10ohm,5%,1/16W,DA,TP,1005
R517,R524,R527,R601	2007-000172	10ohm,5%,1/16W,DA,TP,1005
R602,R607,R633,R638	2007-000172	10ohm,5%,1/16W,DA,TP,1005
R650,R989,R990	2007-000172	10ohm,5%,1/16W,DA,TP,1005
R651,R654	2007-000173	22ohm,5%,1/16W,DA,TP,1005
R515,R516,R518	2007-000932	470ohm,5%,1/16W,DA,TP,1005
R130,R136,R417	2007-001119	680ohm,5%,1/16W,DA,TP,1005
R428	2007-001217	82ohm,5%,1/16W,DA,TP,1005
R623,R625,R627	2007-001288	18ohm,5%,1/16W,DA,TP,1005
R431	2007-001295	39ohm,5%,1/16W,DA,TP,1005
R305,R364,R410,R420	2007-001298	51ohm,5%,1/16W,DA,TP,1005
R511,R519,R520,R648	2007-001298	51ohm,5%,1/16W,DA,TP,1005
R649	2007-001298	51ohm,5%,1/16W,DA,TP,1005
R445	2007-001301	68ohm,5%,1/16W,DA,TP,1005
R404,R406,R617	2007-001305	120ohm,5%,1/16W,DA,TP,1005
R430,R432	2007-001306	150ohm,5%,1/16W,DA,TP,1005
R306,R311,R316,R317	2007-001307	180ohm,5%,1/16W,DA,TP,1005
R510,R613,R805	2007-001308	200ohm,5%,1/16W,DA,TP,1005
R128,R134	2007-001311	270ohm,5%,1/16W,DA,TP,1005
R356,R357,R365,R526	2007-001313	330ohm,5%,1/16W,DA,TP,1005
R950,R953	2007-001313	330ohm,5%,1/16W,DA,TP,1005
R525,R612	2007-001316	820ohm,5%,1/16W,DA,TP,1005
R507,R512	2007-001317	910ohm,5%,1/16W,DA,TP,1005
R629	2007-001323	3Kohm,5%,1/16W,DA,TP,1005
R354,R608	2007-001325	3.3Kohm,5%,1/16W,DA,TP,1005
R618,R643	2007-001339	180Kohm,5%,1/16W,DA,TP,1005
R413	2007-002797	560OHM,5%,1/16W,DA,TP,1005
R301	2007-003020	4.3KOHM,5%,1/16W,DA,TP,1005
R427,R429	2007-003030	91OHM,5%,1/16W,DA,TP,1005
R304	2007-003112	27OHM,5%,1/16W,DA,TP,1005

LOCATION	SEC.CODE	DESCRIPTIONS
R407	2007-007001	3.9KOHM,5%,1/16W,DA,TP,1005
R521	2007-007090	11KOHM,5%,1/16W,DA,TP,1005
R362	2007-007096	160OHM,5%,1/16W,DA,TP,1005
R132,R137,R259	2007-007107	100Kohm,1%,1/16W,DA,TP,1005
R265	2007-007133	300ohm,1%,1/16W,DA,TP,1005
R261	2007-007135	18Kohm,1%,1/16W,DA,TP,1005
R434,R619,R903,R905	2007-007137	1.2Kohm,1%,1/16W,DA,TP,1005
R522	2007-007141	240OHM,5%,1/16W,DA,TP,1005
R904,R987	2007-007142	10Kohm,1%,1/16W,DA,TP,1005
R514,R523,R626,R645	2007-007195	3.9OHM,5%,1/16W,DA,TP,1005
R652	2007-007195	3.9OHM,5%,1/16W,DA,TP,1005
R262,R416	2007-007309	12Kohm,1%,1/16W,DA,TP,1005
R414	2007-007310	8.2Kohm,1%,1/16W,DA,TP,1005
R412	2007-007311	22Kohm,1%,1/16W,DA,TP,1005
R409	2007-007316	3.3Kohm,1%,1/16W,DA,TP,1005
R200,R201,R202,R203	2007-007317	2.2Kohm,1%,1/16W,DA,TP,1005
R901	2007-007317	2.2Kohm,1%,1/16W,DA,TP,1005
R121,R127,R133,R303	2007-007318	1Kohm,1%,1/16W,DA,TP,1005
R313,R415	2007-007318	1Kohm,1%,1/16W,DA,TP,1005
R266	2007-007470	7.5Kohm,1%,1/16W,DA,TP,1005
R435,R655	2007-007588	1.8Kohm,1%,1/16W,DA,TP,1005
R258	2007-007590	82Kohm,1%,1/16W,DA,TP,1005
R260	2007-007592	270Kohm,1%,1/16W,DA,TP,1005
R979,R981	2007-007627	16Kohm,1%,1/16W,DA,TP,1005
R983	2007-007630	14Kohm,1%,1/16W,DA,TP,1005
R355,R900,R902	2007-007788	332OHM,1%,1/16W,DA,TP,1005
C524	2203-000151	1.5nF,5%,50V,NPO,TP,2012,-
C117	2203-000189	100nF,+80-20%,25V,Y5V,TP,1608,
C215,C216,C217,C218	2203-000233	100pF,5%,50V,NPO,TP,1005,-
C303,C318,C337,C362	2203-000233	100pF,5%,50V,NPO,TP,1005,-
C368,C411,C416,C501	2203-000233	100pF,5%,50V,NPO,TP,1005,-
C502,C503,C508,C509	2203-000233	100pF,5%,50V,NPO,TP,1005,-
C516,C521,C623,C628	2203-000233	100pF,5%,50V,NPO,TP,1005,-
C635,C642	2203-000233	100pF,5%,50V,NPO,TP,1005,-
C300,C307,C348	2203-000278	10pF,0.5pF,50V,NPO,TP,1005,-
C445	2203-000311	120pF,5%,50V,NPO,TP,1005,-
C310,C512,C514,C539	2203-000330	12pF,5%,50V,NPO,TP,1005,-
C604	2203-000330	12pF,5%,50V,NPO,TP,1005,-
C625	2203-000359	150pF,5%,50V,NPO,TP,1005,-
C316,C951,C958,C959	2203-000386	15pF,5%,50V,NPO,TP,1005,-
C968,C970	2203-000386	15pF,5%,50V,NPO,TP,1005,-
C207,C311,C351,C352	2203-000438	1nF,10%,50V,X7R,TP,1005,-

LOCATION	SEC.CODE	DESCRIPTIONS
C354,C356,C361,C371	2203-000438	1nF,10%,50V,X7R,TP,1005,-
C373,C375,C379,C504	2203-000438	1nF,10%,50V,X7R,TP,1005,-
C522,C621,C637,C641	2203-000438	1nF,10%,50V,X7R,TP,1005,-
C966,C967	2203-000438	1nF,10%,50V,X7R,TP,1005,-
C624	2203-000455	1nF,5%,50V,NPO,TP,2012,-
C177	2203-000509	2.2pF,0.25pF,50V,NPO,TP,1608,-
C409	2203-000585	220pF,10%,50V,X7R,TP,1005,-
C950,C956	2203-000604	22nF,10%,25V,X7R,TP,1608,-
C305,C330,C374,C376	2203-000628	22pF,5%,50V,NPO,TP,1005,-
C378,C415,C505,C506	2203-000628	22pF,5%,50V,NPO,TP,1005,-
C515,C611,C617	2203-000628	22pF,5%,50V,NPO,TP,1005,-
C405,C418,C423,C428	2203-000679	27pF,5%,50V,NPO,TP,1005,-
C454,C457,C458,C459	2203-000679	27pF,5%,50V,NPO,TP,1005,-
C460,C510,C511,C517	2203-000679	27pF,5%,50V,NPO,TP,1005,-
C520,C529,C530,C632	2203-000679	27pF,5%,50V,NPO,TP,1005,-
C633,C639	2203-000679	27pF,5%,50V,NPO,TP,1005,-
C346	2203-000696	2pF,0.25pF,50V,NPO,TP,1005,-
C609	2203-000725	3.9nF,10%,50V,X7R,TP,1005,-
C614	2203-000800	33nF,10%,25V,X7R,TP,1608,-
C302,C306,C319,C467	2203-000812	33pF,5%,50V,NPO,TP,1005,-
C610	2203-000836	390pF,10%,50V,X7R,TP,1005,-
C325	2203-000854	39pF,5%,50V,NPO,TP,1005,-
C128,C136	2203-000885	4.7nF,10%,25V,X7R,TP,1005,-
C304,C357,C810,C819	2203-000940	470pF,10%,50V,X7R,TP,1005,-
C862,C867	2203-000940	470pF,10%,50V,X7R,TP,1005,-
C321,C350,C377,C647	2203-001017	4pF,0.25pF,50V,NPO,TP,1005,-
C518,C519	2203-001072	56pF,5%,50V,NPO,TP,1005,-
C165, C166, C167, C168	2203-001101	6.8nF,10%,25V,X7R,TP,1005,-
C507,C513	2203-001153	68pF,5%,50V,NPO,TP,1005,-
C315,C540	2203-001178	6pF,0.5pF,50V,NPO,TP,1005,-
C314,C339	2203-001201	7pF,0.5pF,50V,NPO,TP,1005,-
C131,C139	2203-001211	8.2nF,10%,50V,X7R,TP,1608,-
C410,C430	2203-001221	820pF,10%,50V,X7R,TP,1005,-
C613	2203-001259	8pF,0.5pF,50V,NPO,TP,1005,-
C169	2203-001402	220nF,+80-20%,16V,Y5V,TP,1608,
C523	2203-001408	270pF,5%,50V,COG,TP,1608,-
C170,C171,C172,C173	2203-001598	2.2uF,+80-20%,16V,Y5V,TP,2012,
C429	2203-002525	560pF,10%,50V,X7R,TP,1005,-
C317,C991,C993,C954	2203-003054	9PF,0.25PF,50V,CH,TP,1005,-
C969,C996,C997	2203-003054	9PF,0.25PF,50V,CH,TP,1005,-
C313,C341,C353	2203-005050	1.8pF,0.25pF,50V,NPO,TP,1005,-
C210,C528,C603,C644	2203-005054	4.7pF,0.25pF,50V,NPO,TP,1005,-

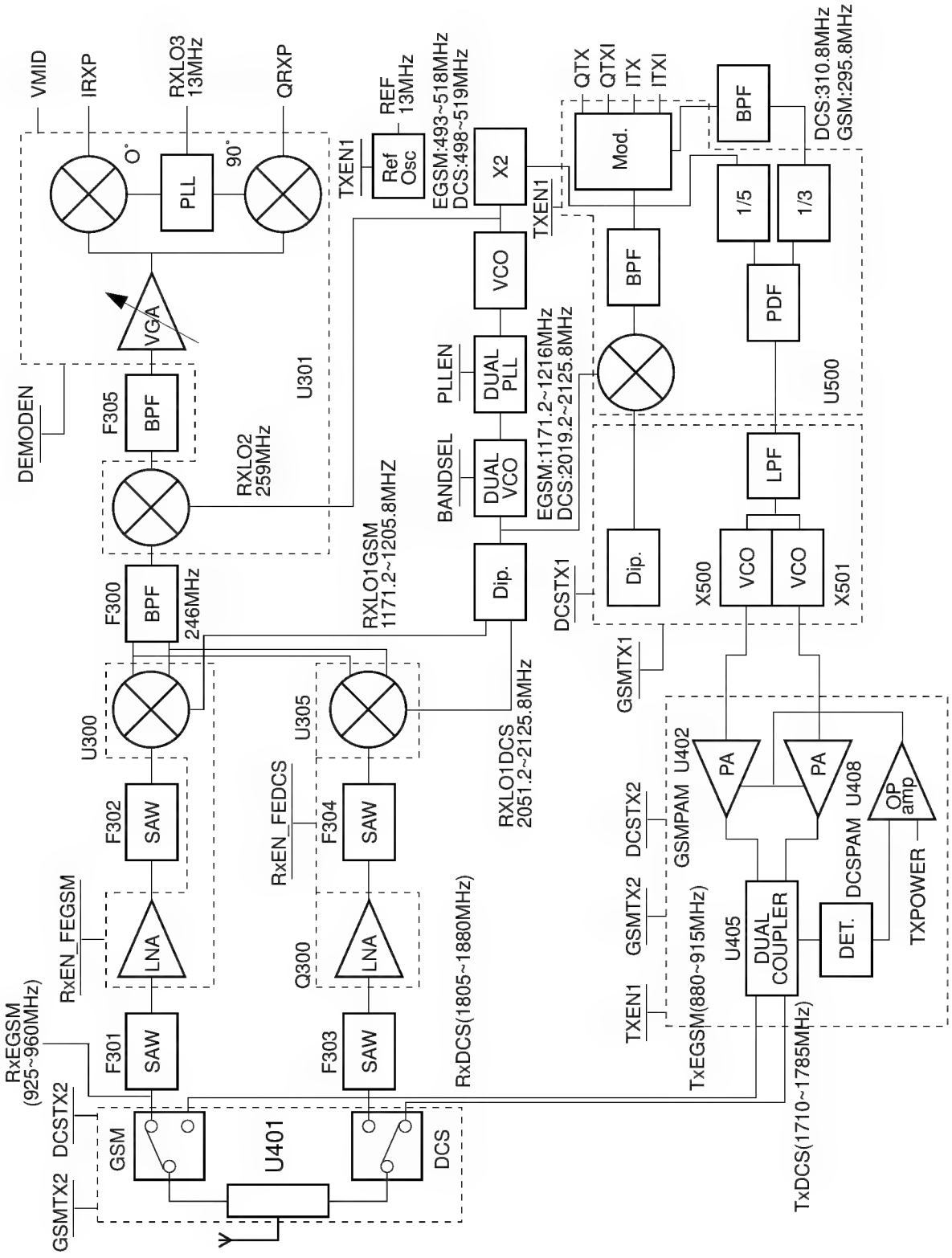
LOCATION	SEC.CODE	DESCRIPTIONS
C606	2203-005057	8.2pF,0.25pF,50V,NPO,TP,1005,-
C100,C102,C106,C107	2203-005061	100nF,+80-20%,16V,Y5V,TP,1005,
C126,C134,C141	2203-005061	100nF,+80-20%,16V,Y5V,TP,1005,
C201,C204,C205	2203-005061	100nF,+80-20%,16V,Y5V,TP,1005,
C206,C214,C254,C258	2203-005061	100nF,+80-20%,16V,Y5V,TP,1005,
C259,C260,C261,C322	2203-005061	100nF,+80-20%,16V,Y5V,TP,1005,
C358,C363,C372,C500	2203-005061	100nF,+80-20%,16V,Y5V,TP,1005,
C608,C618,C634,C800	2203-005061	100nF,+80-20%,16V,Y5V,TP,1005,
C851,C853,C855,C869	2203-005061	100nF,+80-20%,16V,Y5V,TP,1005,
C874,C901,C902,C903	2203-005061	100nF,+80-20%,16V,Y5V,TP,1005,
C904,C905,C961,C964	2203-005061	100nF,+80-20%,16V,Y5V,TP,1005,
C971,C972,C973,C974	2203-005061	100nF,+80-20%,16V,Y5V,TP,1005,
C990	2203-005061	100nF,+80-20%,16V,Y5V,TP,1005,
C257,C364,C533,C534	2203-005065	1uF,+80-20%,10V,Y5V,TP,1608,-
C535,C536,C638,C669	2203-005065	1uF,+80-20%,10V,Y5V,TP,1608,-
C830,C831,C872	2203-005065	1uF,+80-20%,10V,Y5V,TP,1608,-
C127,C135	2203-005138	1.8nF,10%,50V,X7R,TP,1005,-
C342,C645	2203-005158	2.2pF,0.25pF,50V,NPO,TP,1005,0
C629	2203-005195	10nF,5%,25V,COH,TP,3216,-
C349	2203-005234	1.2pF,0.25pF,50V,NPO,TP,1005,0
C602,C646	2203-005444	3pF,0.1pF,50V,NPO,TP,1005,-
C957,C962	2203-005481	47nF,10%,10V,X7R,TP,1005,-
C963	2203-005481	47nF,10%,10V,X7R,TP,1005,-
C365,C616,C955	2203-005562	10uF,+80-20%,10V,Y5V,TP,3216,-
C108,C200,C211,C262	2203-005607	10NF,10%,16V,X7R,BK,1005
C333,C359,C360,C433	2203-005607	10NF,10%,16V,X7R,BK,1005
C435,C531,C600,C601	2203-005607	10NF,10%,16V,X7R,BK,1005
C605,C607,C615,C620	2203-005607	10NF,10%,16V,X7R,BK,1005
C622,C626,C627,C630	2203-005607	10NF,10%,16V,X7R,BK,1005
C636,C801,C828,C850	2203-005607	10NF,10%,16V,X7R,BK,1005
C852,C854,C859,C870	2203-005607	10NF,10%,16V,X7R,BK,1005
C979,C612	2203-005607	10NF,10%,16V,X7R,BK,1005
C252,C253	2404-000203	3.3uF,10%,16V,-,TP,3216,-
C953	2404-001039	47uF,20%,6.3V,GP,TP,3528,-
C464,C871,C873	2404-001083	220uF,20%,6.3V,LZ,TP,7125,-
C203	2404-001086	4.7uF,20%,6.3V,GP,TP,2012,-
C103,C104,C255,C256	2404-001105	10UF,20%,6.3V,GP,TP,2012
C436,C805,C806,C816	2404-001105	10UF,20%,6.3V,GP,TP,2012
C817,C826,C827,C832	2404-001105	10UF,20%,6.3V,GP,TP,2012
C845,C860,C861,C868	2404-001105	10UF,20%,6.3V,GP,TP,2012
L126,L128	2703-000217	470uH,10%,2.5x3.2x2mm
L127,L129	2703-001071	330uH,10%,3.2x2.5x2mm

LOCATION	SEC.CODE	DESCRIPTIONS
L302	2703-001172	100nH,5%,1.6x0.8x0.8mm
L401	2703-001174	33nH,5%,1.6x0.8x0.8mm
L301,L303,L320,L501	2703-001732	56nH,5%,1.6x0.8x0.8mm
L327	2703-001179	10nH,5%,1x0.5x0.5mm
L175	2703-001290	2.7nH, HK1608 1.6x0.8x0.8mm
L307,L326	2703-001263	4.7nH,10%,1x0.5x0.5mm
L502,L503	2703-001308	68nH,5%,1.6x0.8x0.8mm
L600	2703-001409	12nH,10%,1x0.5x0.5mm
L250,L324	2703-001595	47nH,5%,1.0x0.5x0.5mm
L325,L402	2703-001708	5.6nH,10%,1.0x0.5x0.5mm
L800	2703-001716	22uH,20%,6.60x4.45x2.92mm
L323	2703-001722	18nH,5%,1.0x0.5x0.5mm
L321,L322,L405,L406	2703-001723	33nH,5%,1.0x0.5x0.5mm
L504,L505	2703-001723	33nH,5%,1.0x0.5x0.5mm
L500,L507	2703-001726	27nH,5%,1x0.5x0.5mm
L328,L329,L602	2703-001727	22nH,5%,1x0.5x0.5mm
L604	2703-001728	1.5nH,0.3nH,1x0.5x0.5mm
L308	2703-001730	15nH,5%,1x0.5x0.5mm
L305,L309,L403,L607	2703-001734	6.8nH,5%,1x0.5x0.5mm
L306,L310,L319	2703-001735	3.9nH,10%,1x0.5x0.5mm
L603,L606	2703-001737	2.7nH,0.3nH,1x0.5x0.5mm
L251	2703-001740	10uH,20%,6.6x4.45x2.8mm
L300,L601	2703-001794	120NH,2%,1.8X1.12X1.02MM
L318	2703-001798	2.2NH,0.3NH,1.0X0.5X0.5MM
X201	2801-003747	.032768MHZ,30PPM,28-ACM,9PF,50OHM,TP
X600	2806-001190	1171-1216MHZ,-,-,TP,3V,8MA
X501	2806-001194	1747MHZ,-,10-+2.0DBM,TP,2.75V,-
X500	2806-001199	897.5MHZ,-,-,TP,3V,60MA
X601	2809-001220	13MHz,5ppm,10Kohm//10pF,TP,3V,
F305	2903-001203	BP,13MHZ,-,6DB,1DB,TP,-
F303	2904-001093	1842.5MHz,75MHz,1dB,TP,-,-
F300	2904-001146	246MHz,QCC12B,TP,4dB,LOW-LOSS,
F301	2904-001147	942.5MHz,DCC6,TP,2.3dB,LOW-LOS
F304	2904-001170	1.8425GHZ,-,1.0DB,TP,1805-1880MHZ/2.4DB,1765MHZ-1785MHZ/15DB
F302	2904-001175	942.5MHZ,35MHZ,1DB,TP,3.2DB,619MHZ-905MHZ/27DB
U401	2909-001086	942.5MHZ,897.5MHZ,1.1/1.1DB,TP,-,-
F200,F201	3301-001208	AB,1.6x0.8x0.8mm,-,-
J100	3709-001088	6P,2.54mm,SMD-S,AU
M950	3710-001105	2P,1R,1.27mm,SMD-S,AU
J151	3710-001117	24P,2R,0.8mm,SMD,SN
J176	3710-001302	18P,1R,0.5mm,SMD-A,AUF
J901	3722-001303	6P,2.6mm,AG,BLK,NO

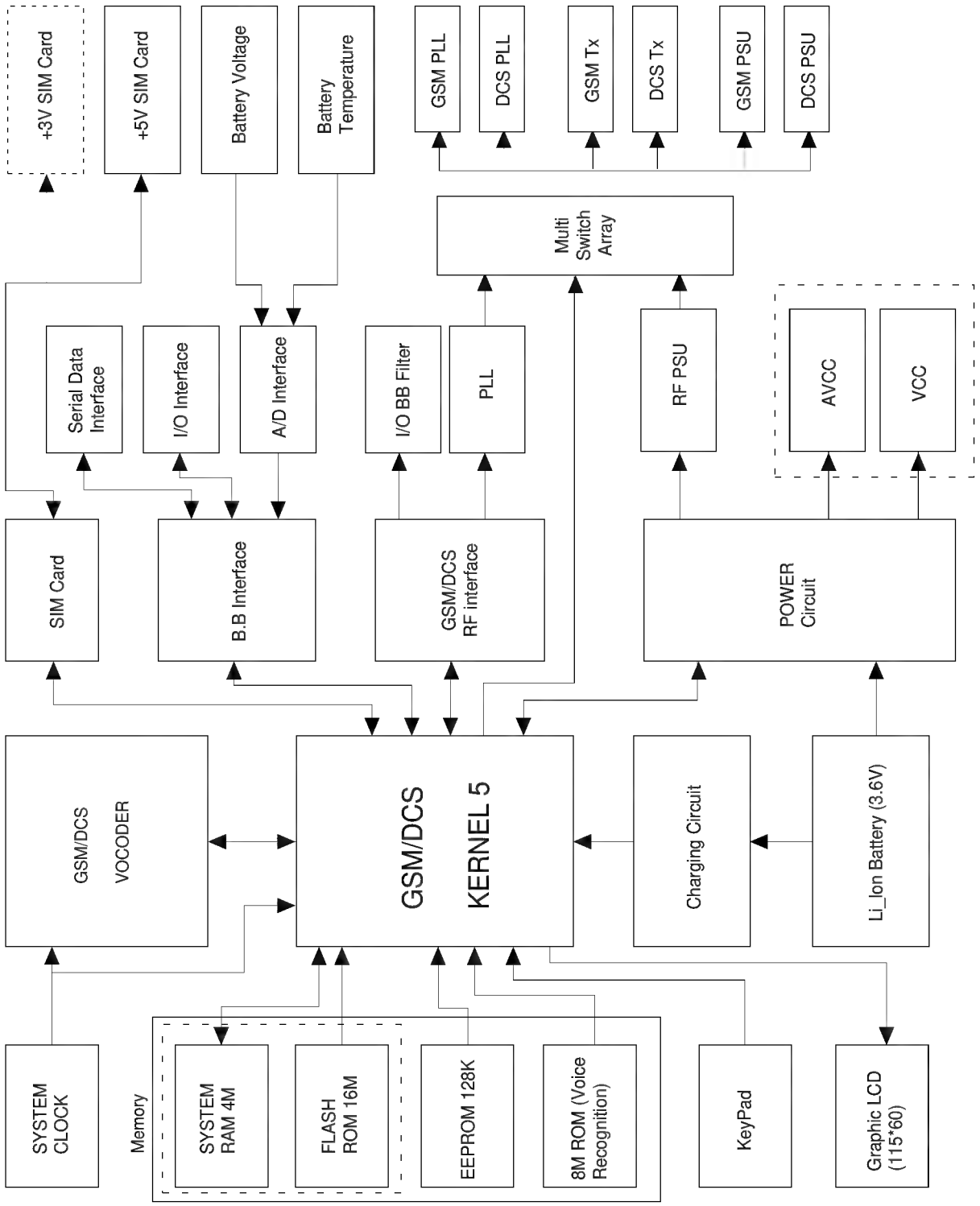
LOCATION	SEC.CODE	DESCRIPTIONS
C863	4302-001081	-,.25MAH,COIN,0.03MA,-,-
U401	4709-001174	890~915/1710~1785MHZ,14DB,24DB,2.0X1.25X1.0,TP
J180	GH07-00007A	SGH-2100,UG-11B02-FLHTX-A,-,-,38.4X47.7X5.0
W176	GH39-00022A	SGH-2100,HANKHE SEMI ANTCABLE,-,-,-,-

3 Block Diagrams

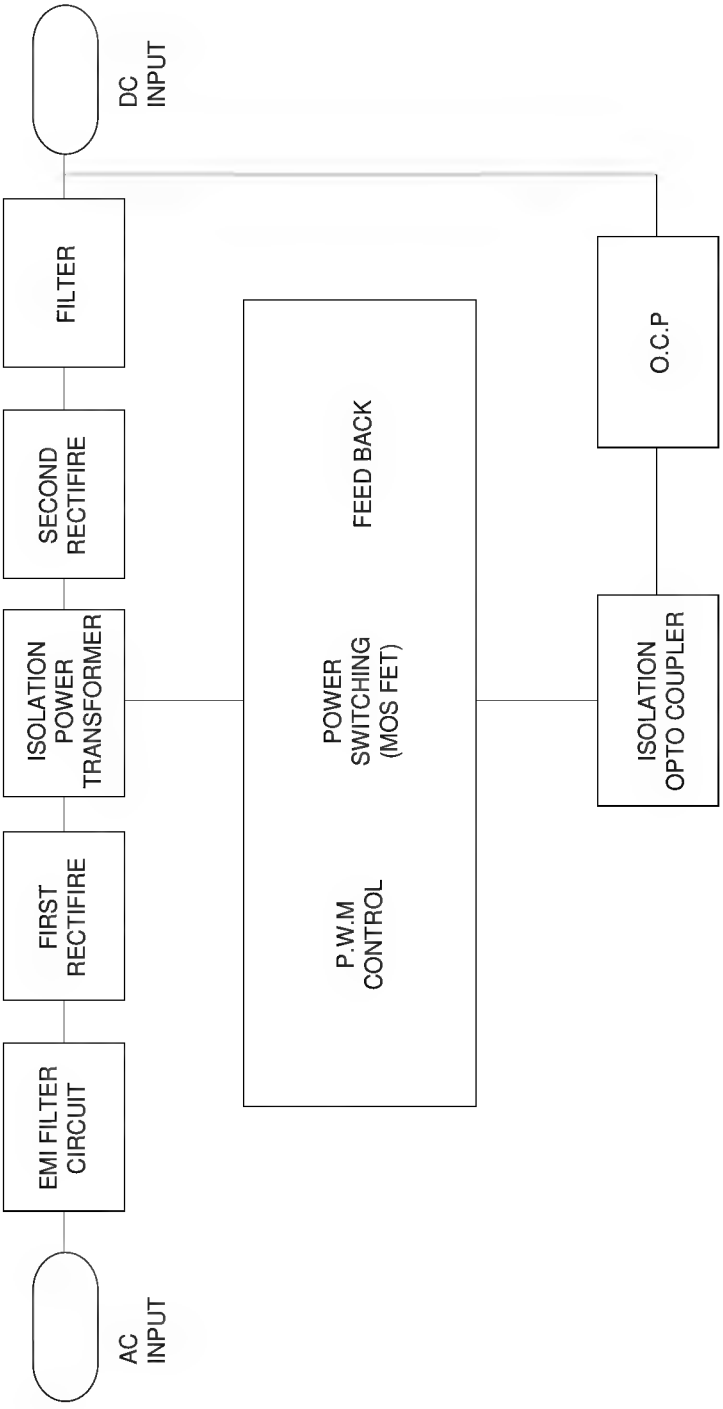
3-1 Main RF



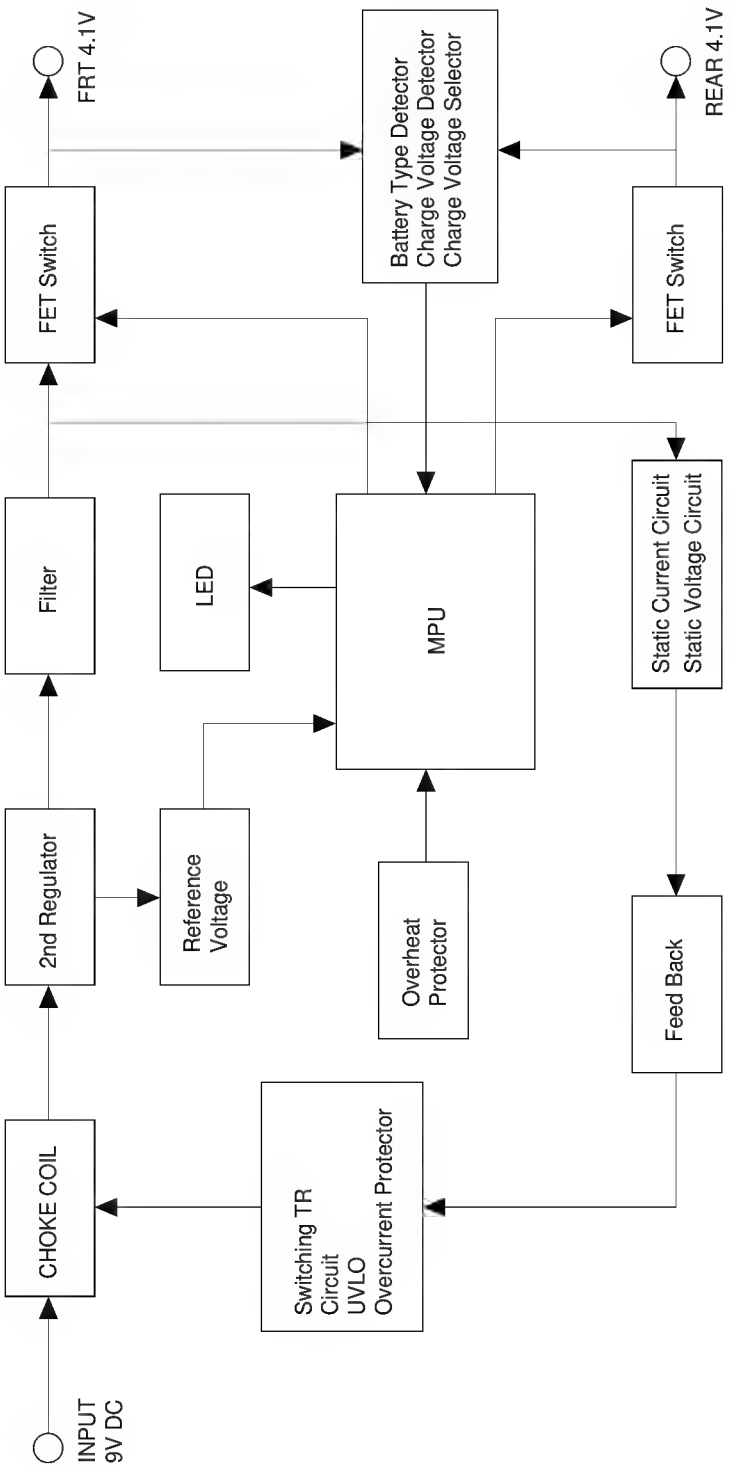
3-2 Main Base Band



3-3 Travel Adaptor

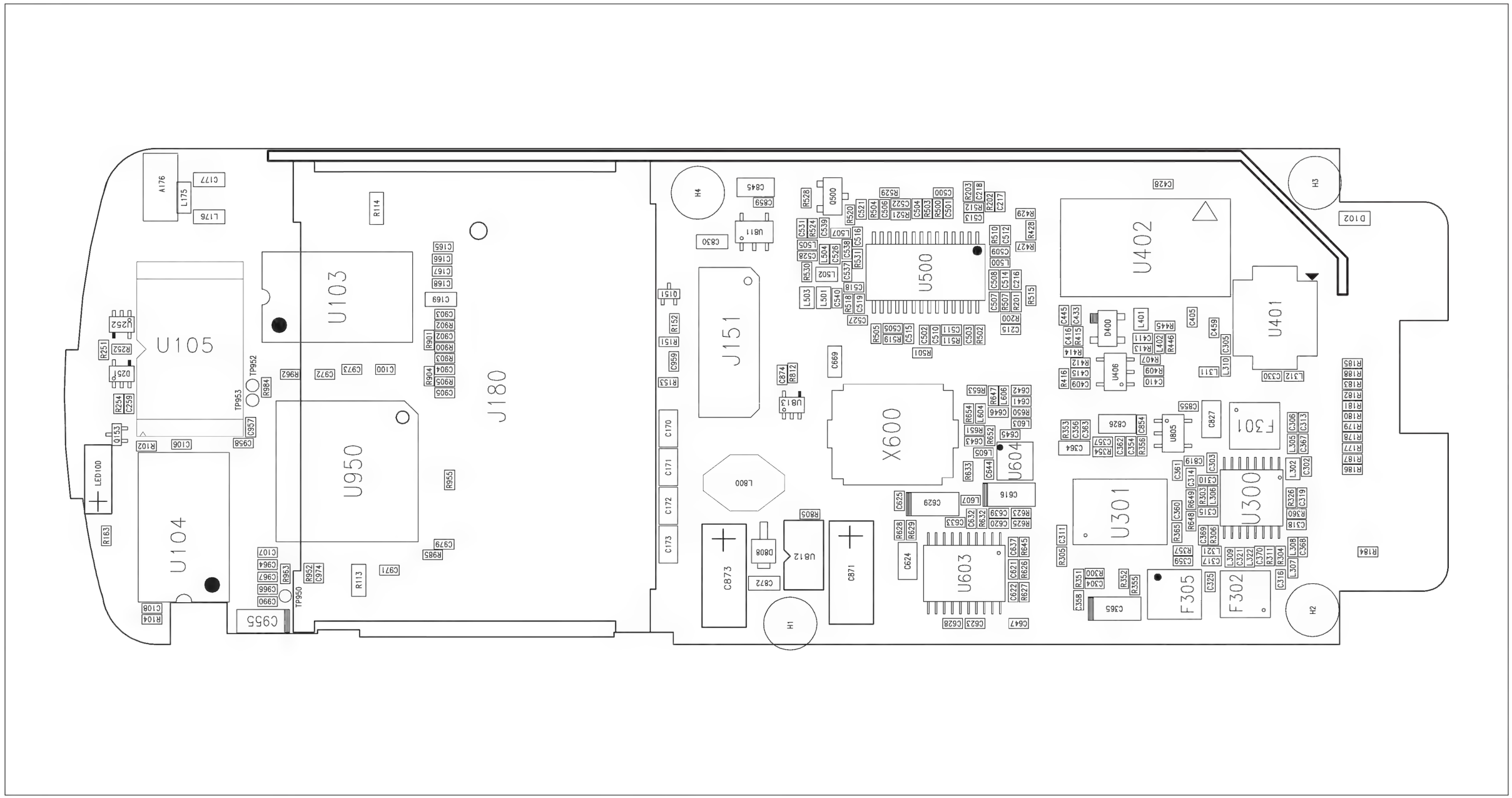


3-4 Desk Top Charger

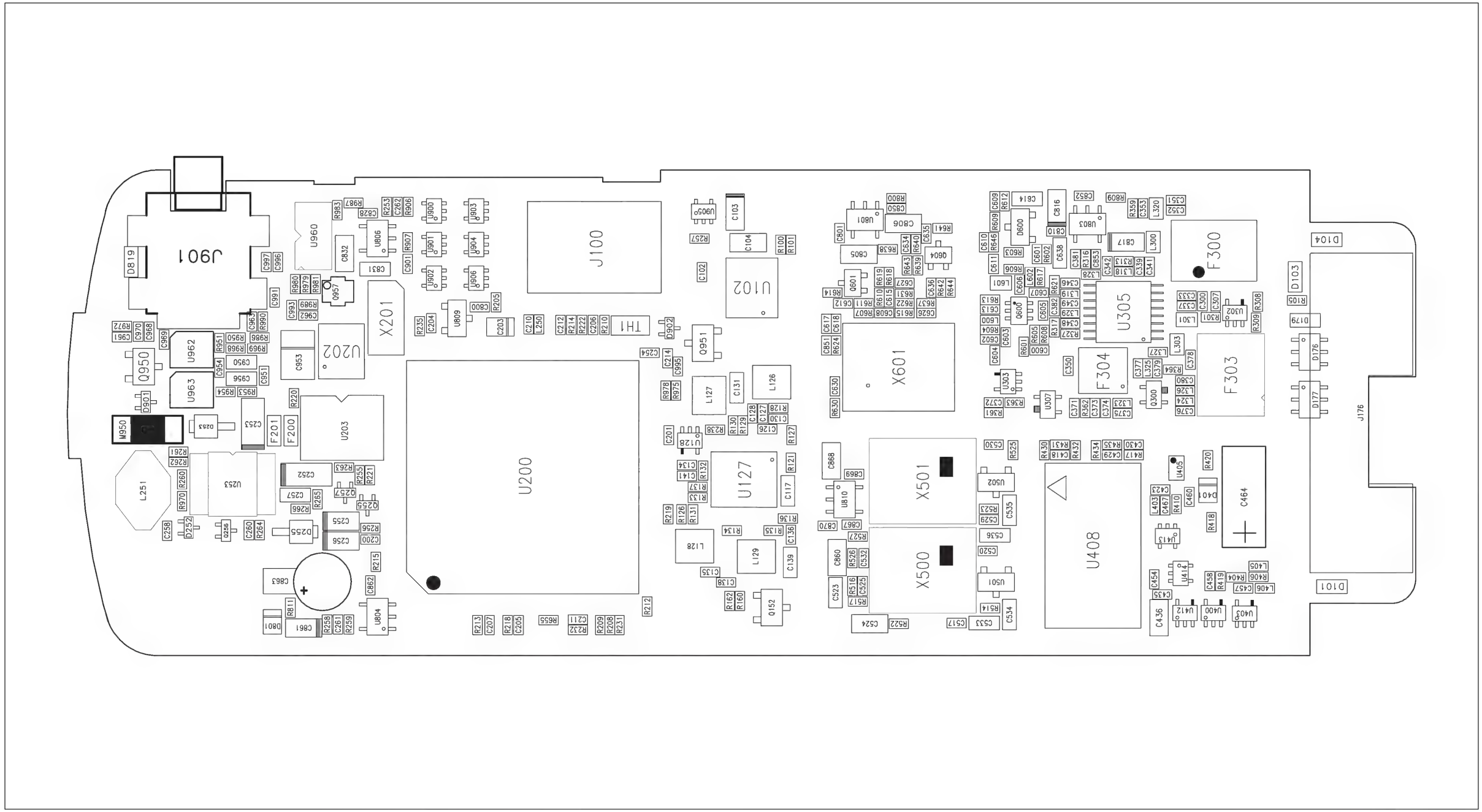


4. PCB Diagrams

4-1 Main Top

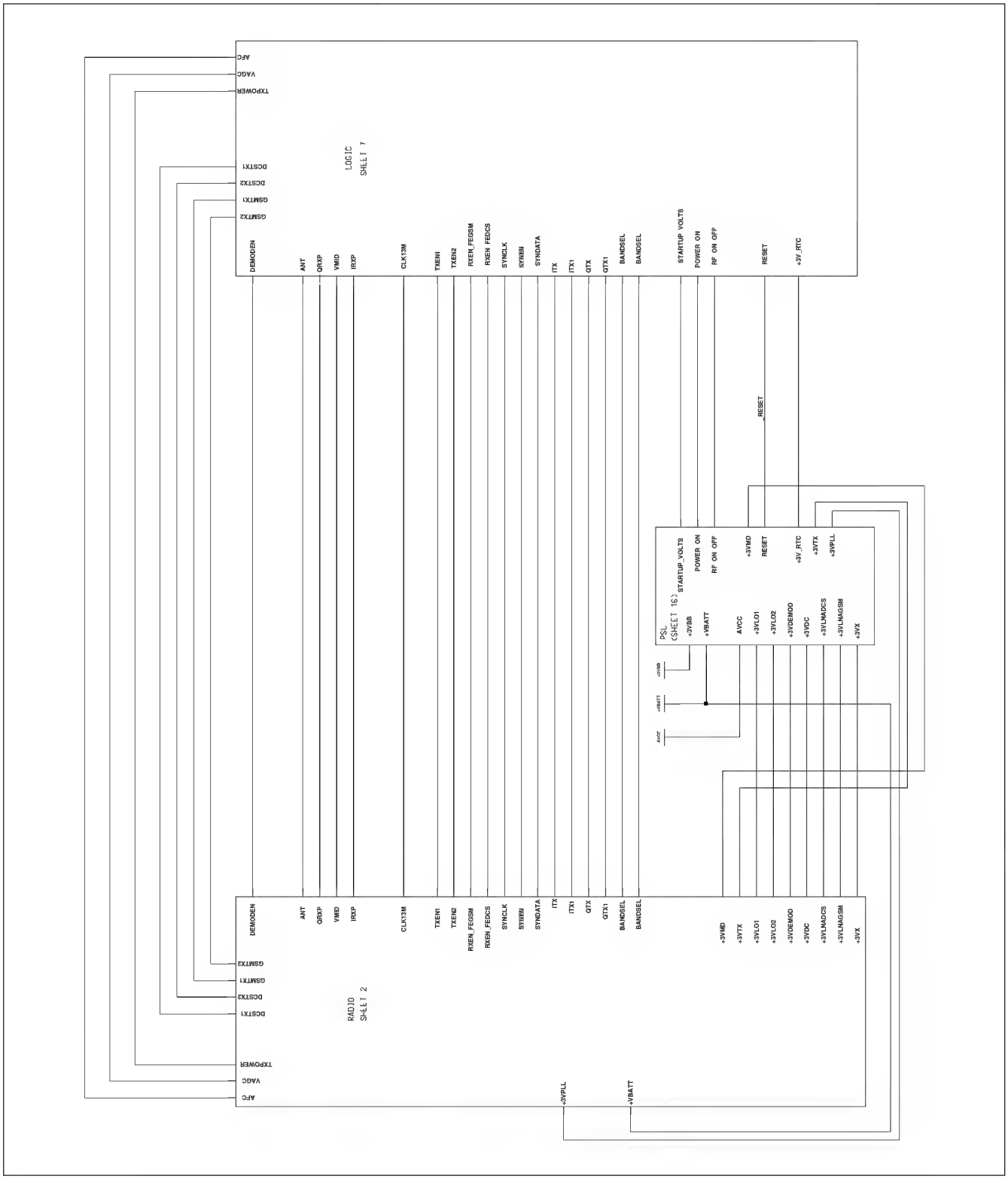


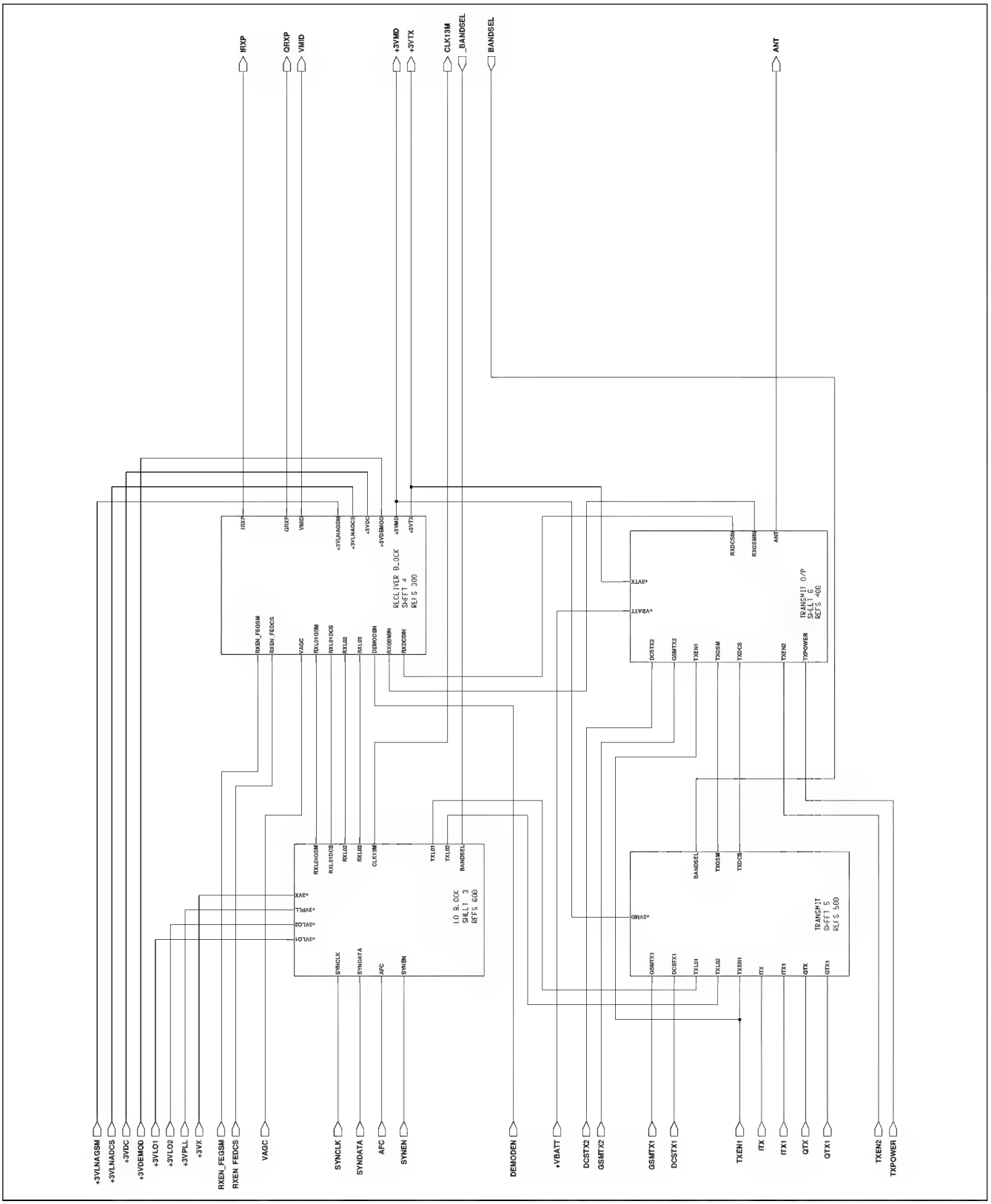
4-2 Main Bottom

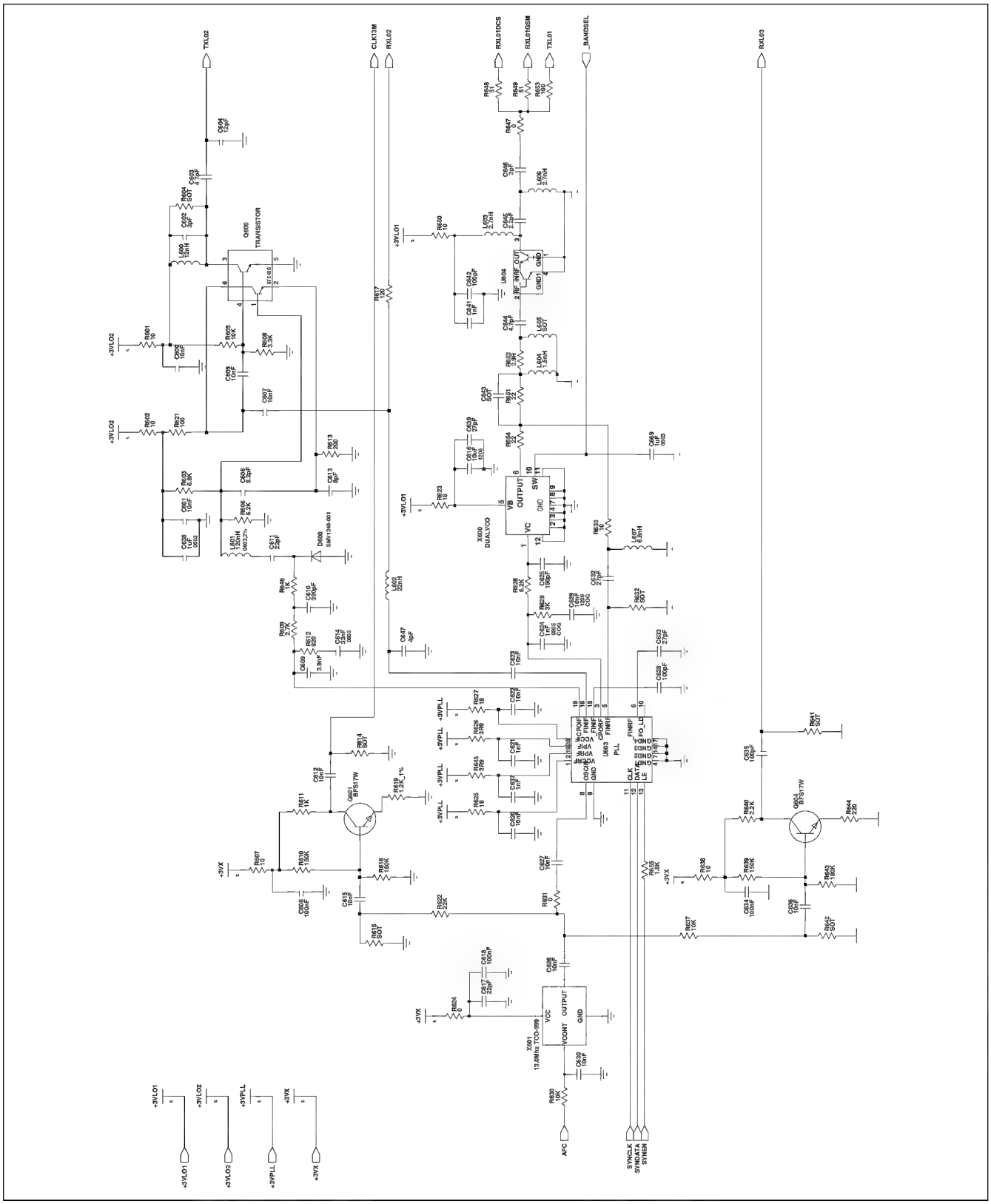


5. Schematic Diagrams

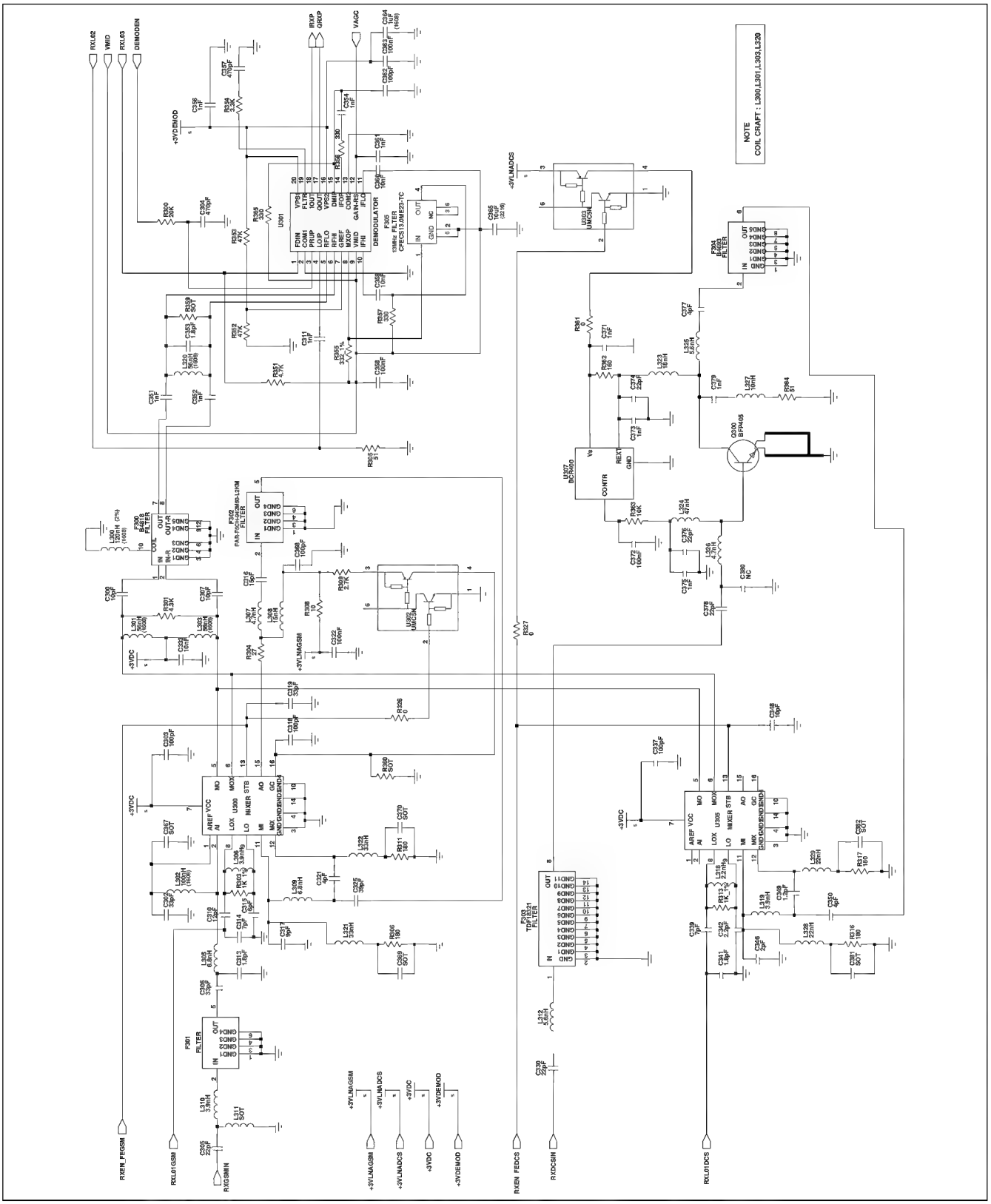
5-1 Top Level



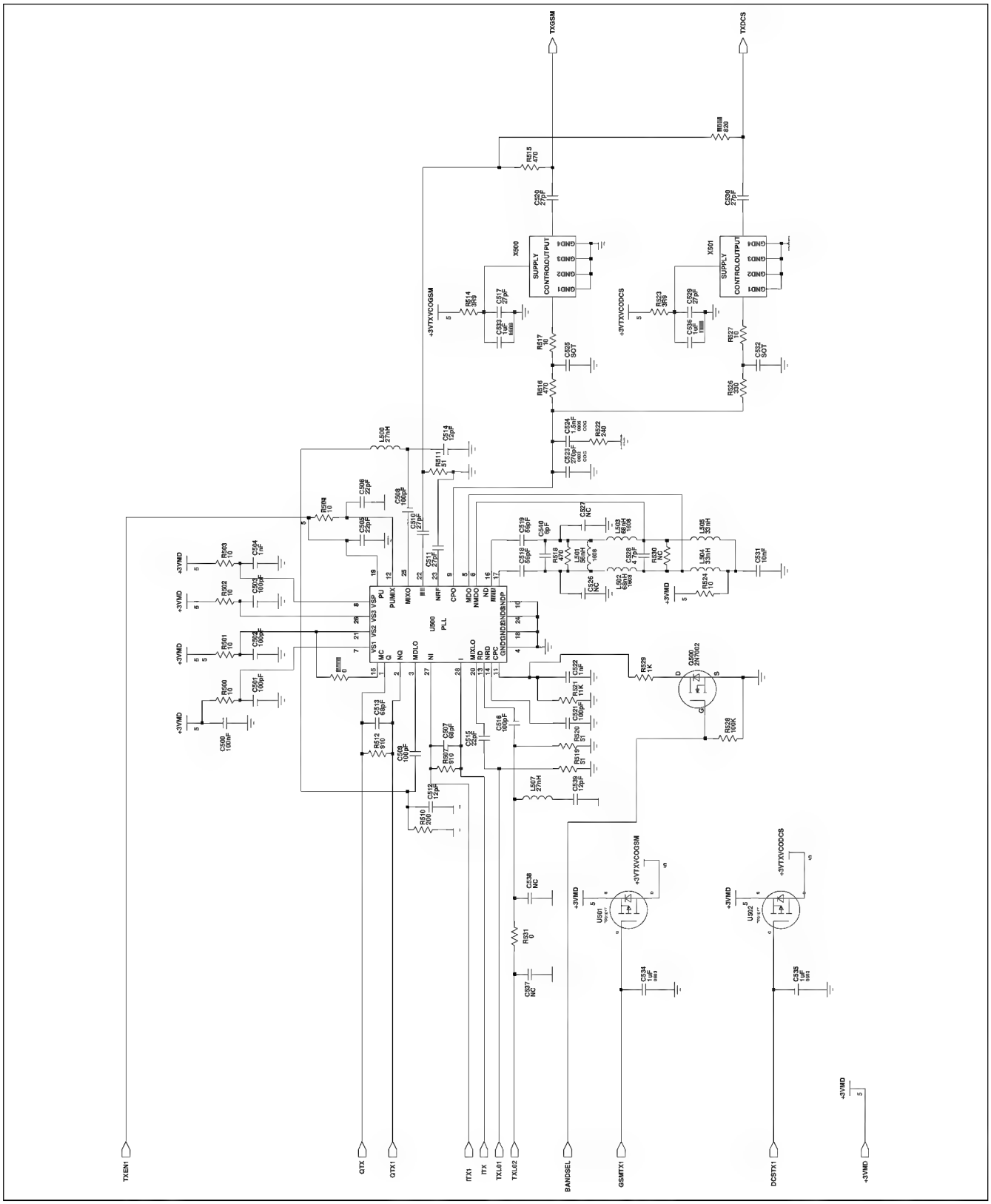

IRXP
QRXP
VMID
+3VMD
+3VTX
CLK13M
_BANDSEL
BANDSEL
ANT
RECEIVER BLOCK
SHEET 4
REFS 300
TRANSMIT O/P
SHEET 6
REFS 400
LO BLOCK
SHEET 3
REFS 600
TRANSMIT
SHEET 5
REFS 500
+3VLNAGSM
+3VLNADCS
+3VDC
+3VDEMOD
+3VLO1
+3VLO2
+3VPLL
+3VX
RXEN_FEGSM
RXEN_FEDCS
VAGC
SYNCLK
SYNDATA
AFC
SYNEN
DEMODEN
+VBATT
DCSTX2
GSMTX2
GSMTX1
DCSTX1
TXEN1
ITX
ITX1
QTX
QTX1
TXEN2
TXPOWER



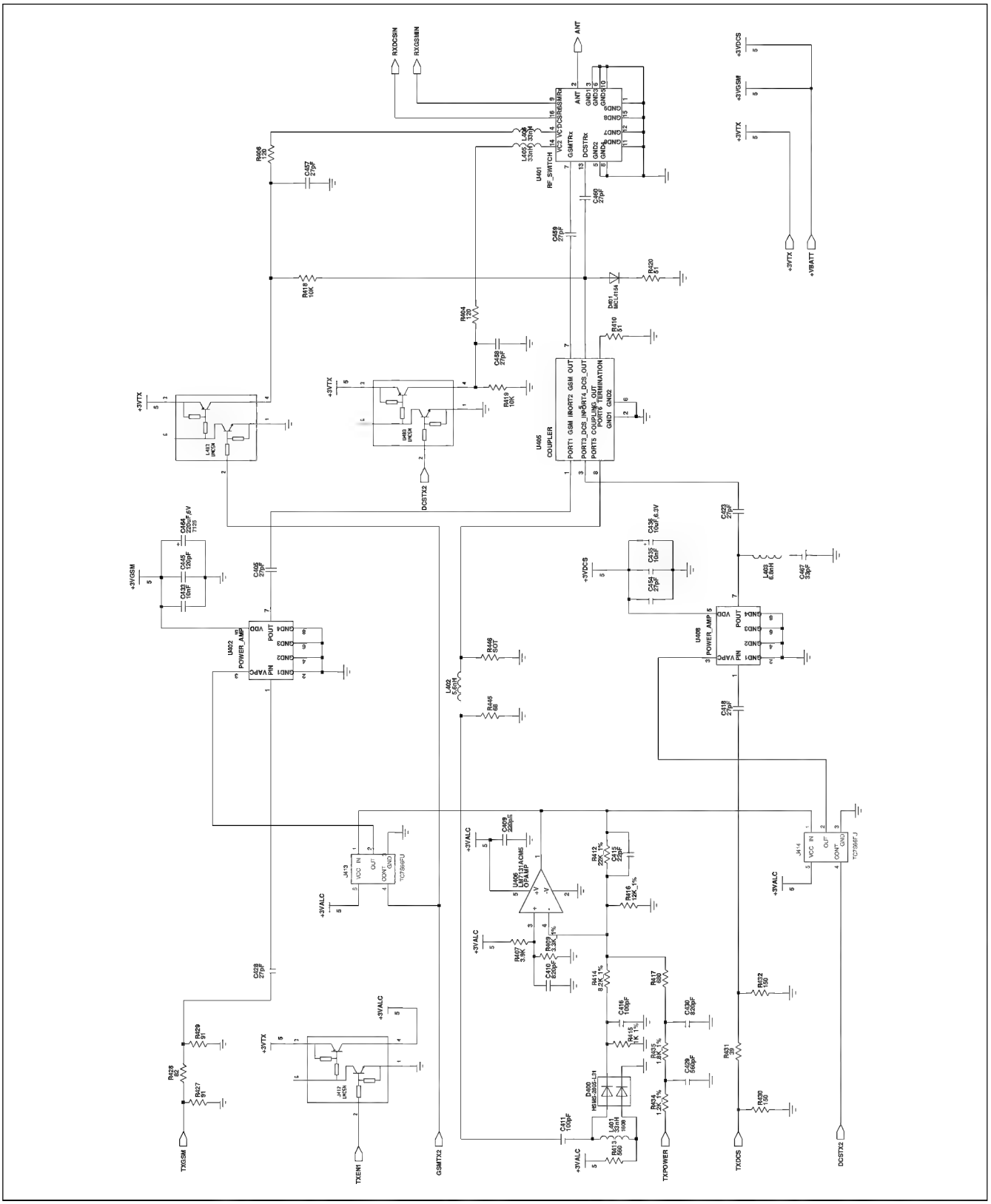
5-4 Receiver


NOTE
COIL CRAFT : L300,L301,L303,L320
RXL02
VMID
RXL03
DEMODEN
IRXP
QRXP
VAGC
+3VDEMOD
+3VLNADCS
+3VLNAGSM
+3VDC
RXEN_FEGSM
RXL01GSM
RXGSMIN
RXEN_FEDCS
RXDCSIN
RXL01DCS

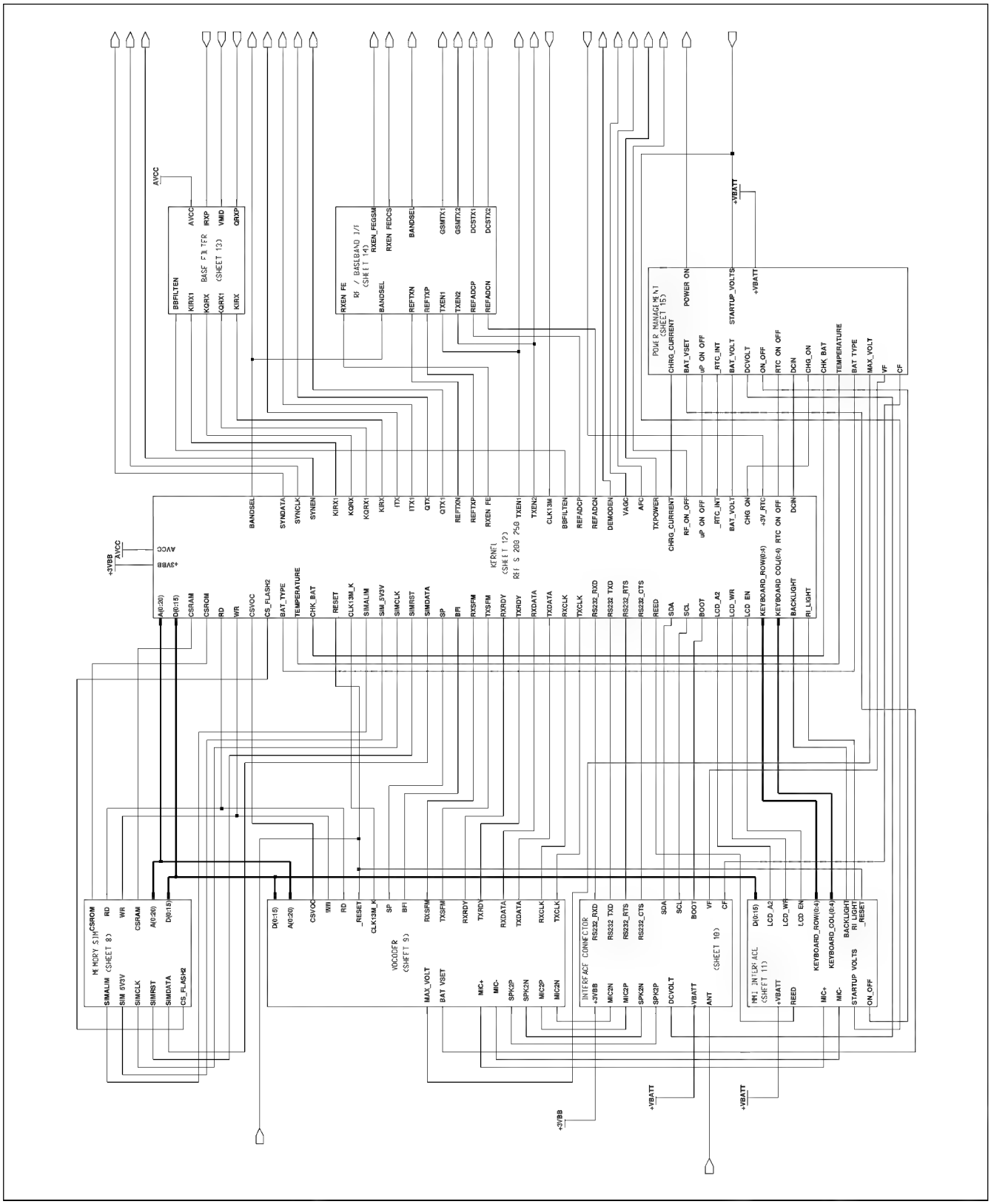
5-5 Modulator & Tx Vco



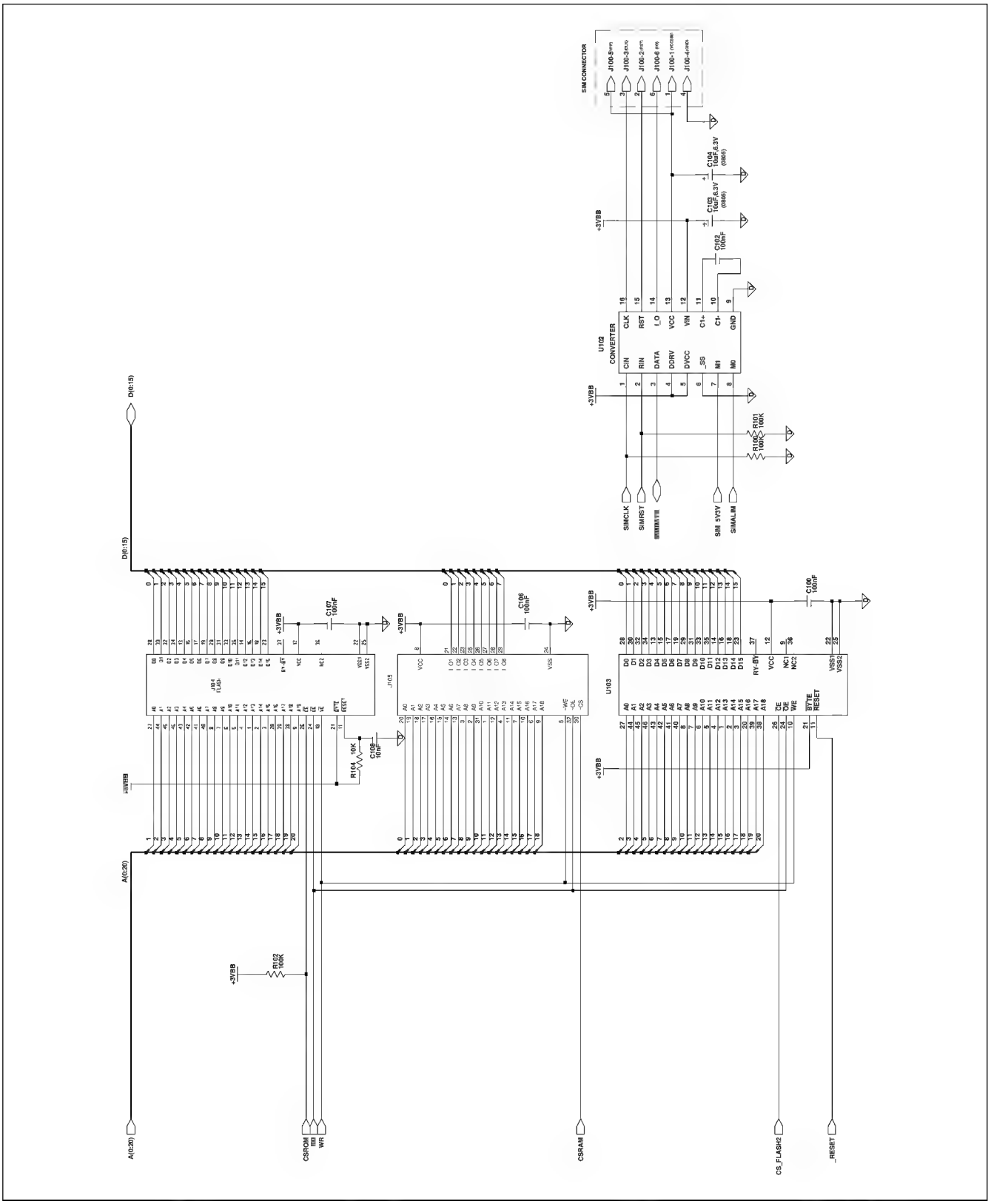
5-6 Transmit Output Stage



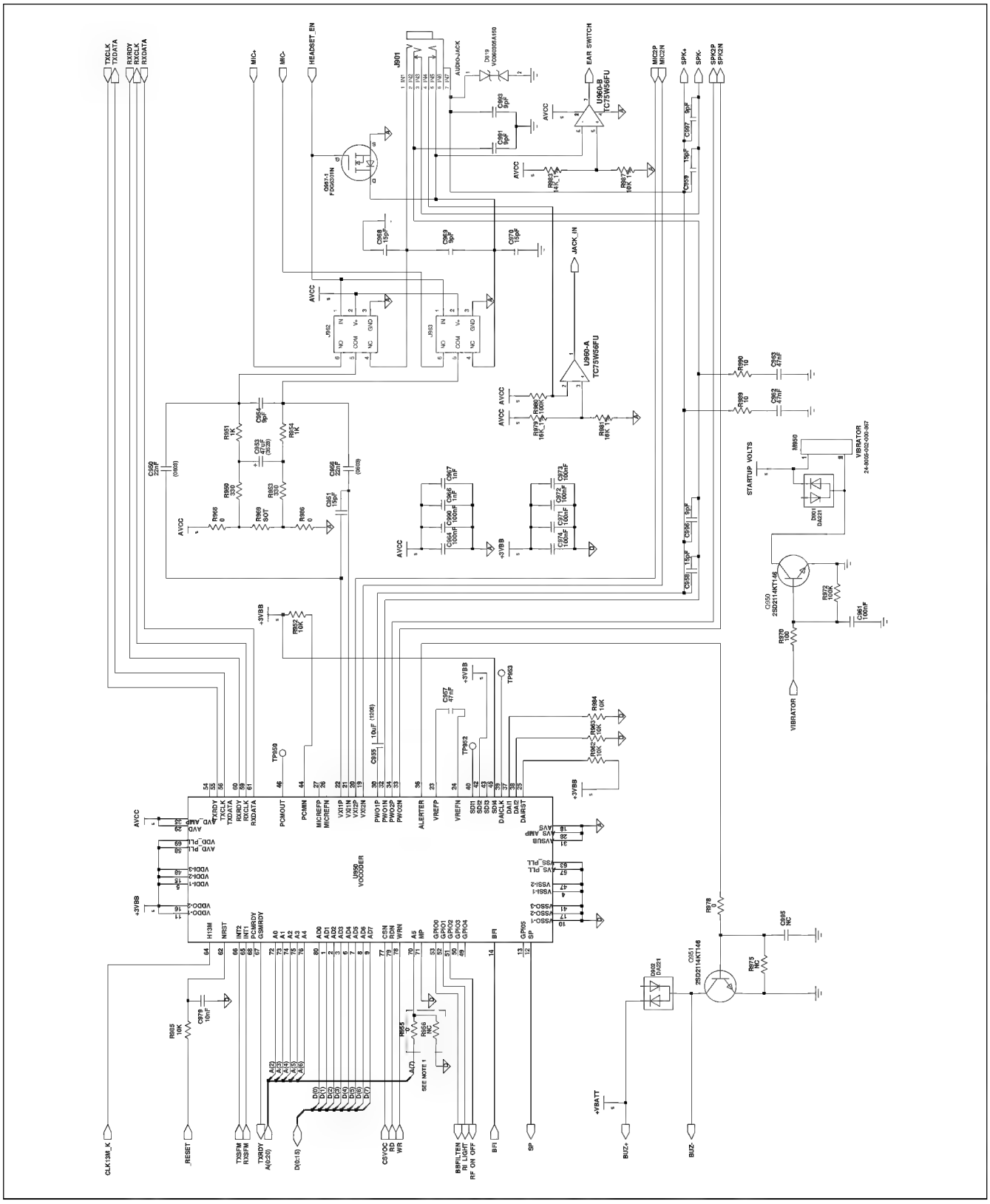
5-7 Base Band Block



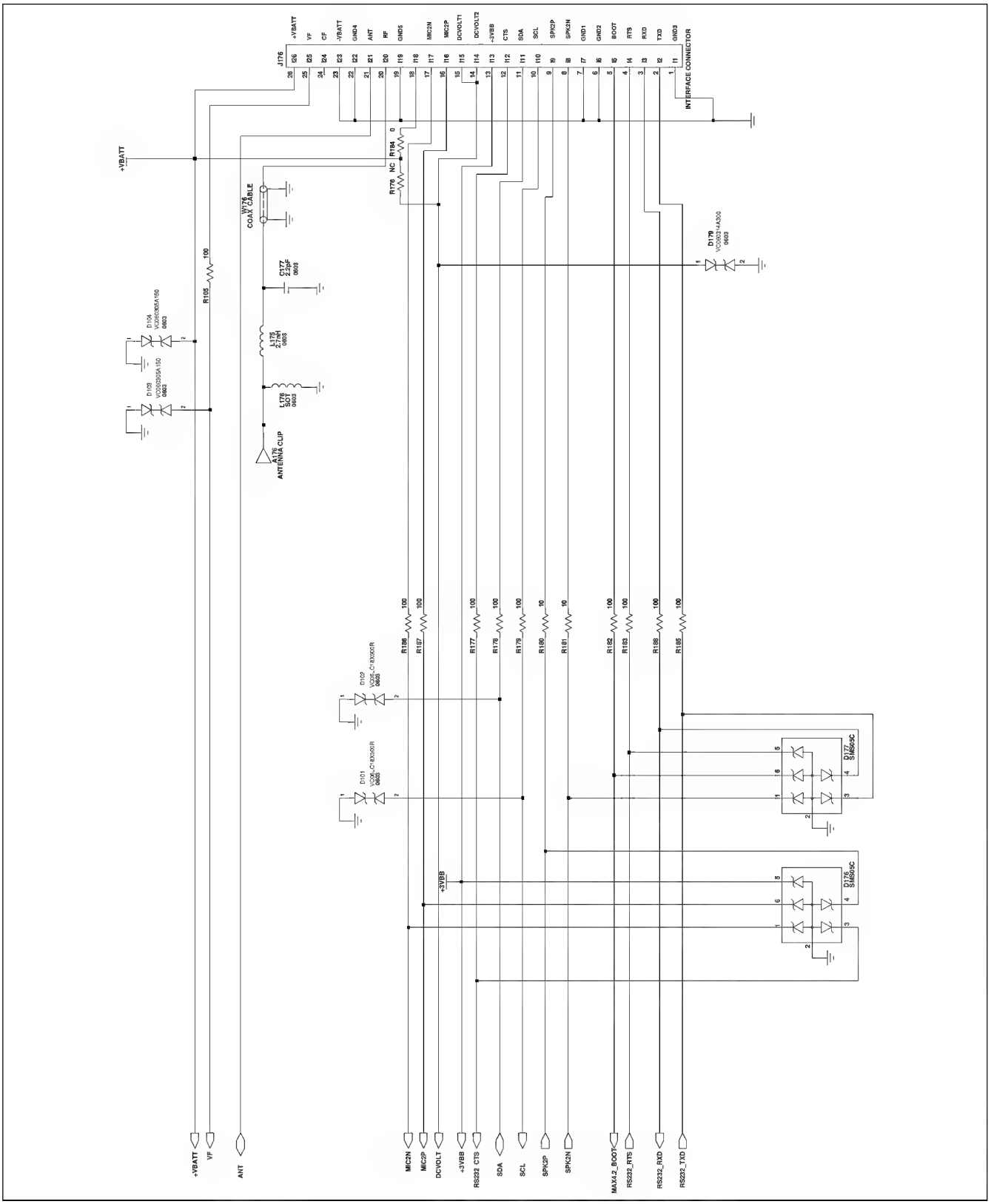
5-8 Memory & SIM Schematic

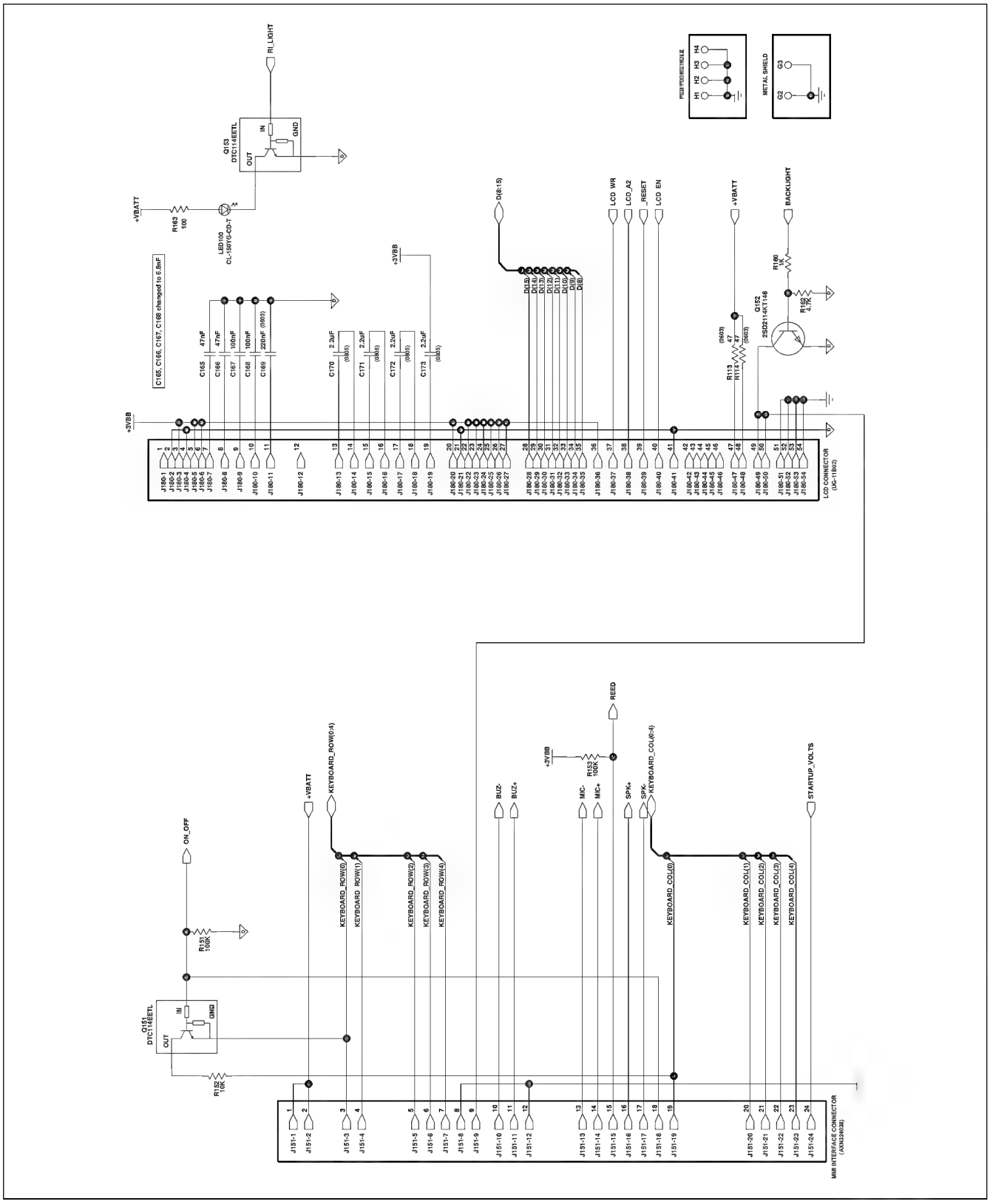


5-9 Vocoder

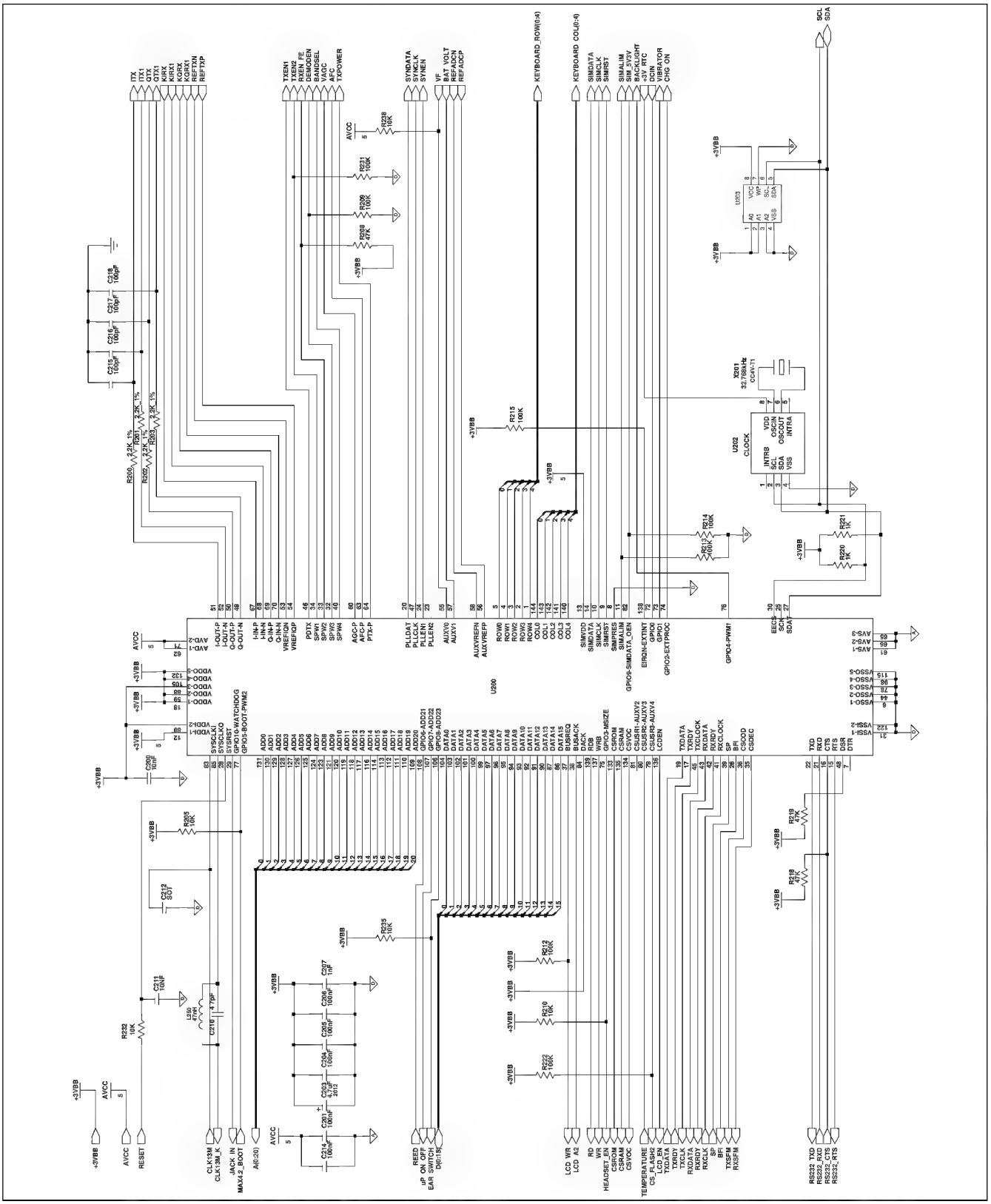


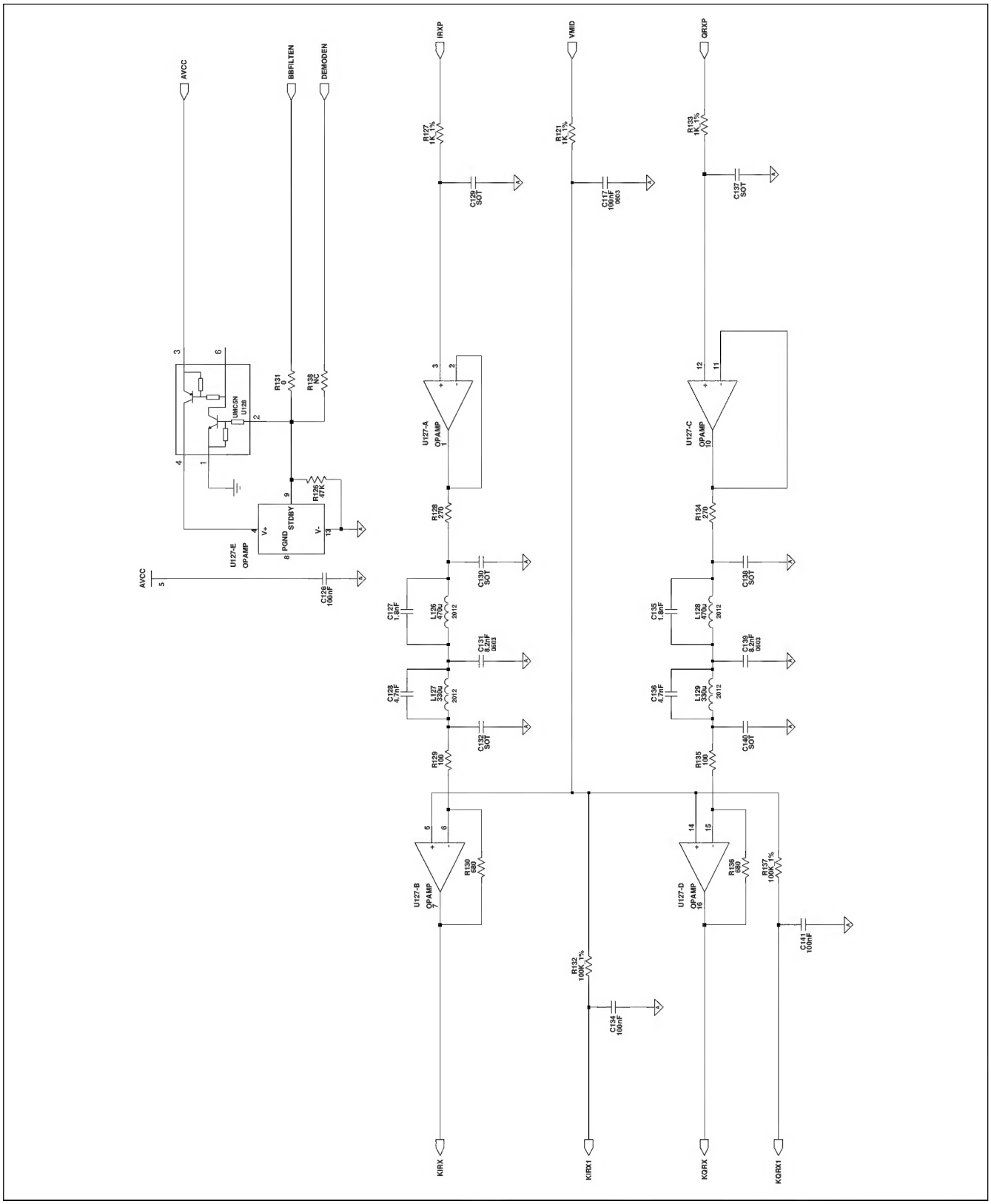
5-10 Interface Connector

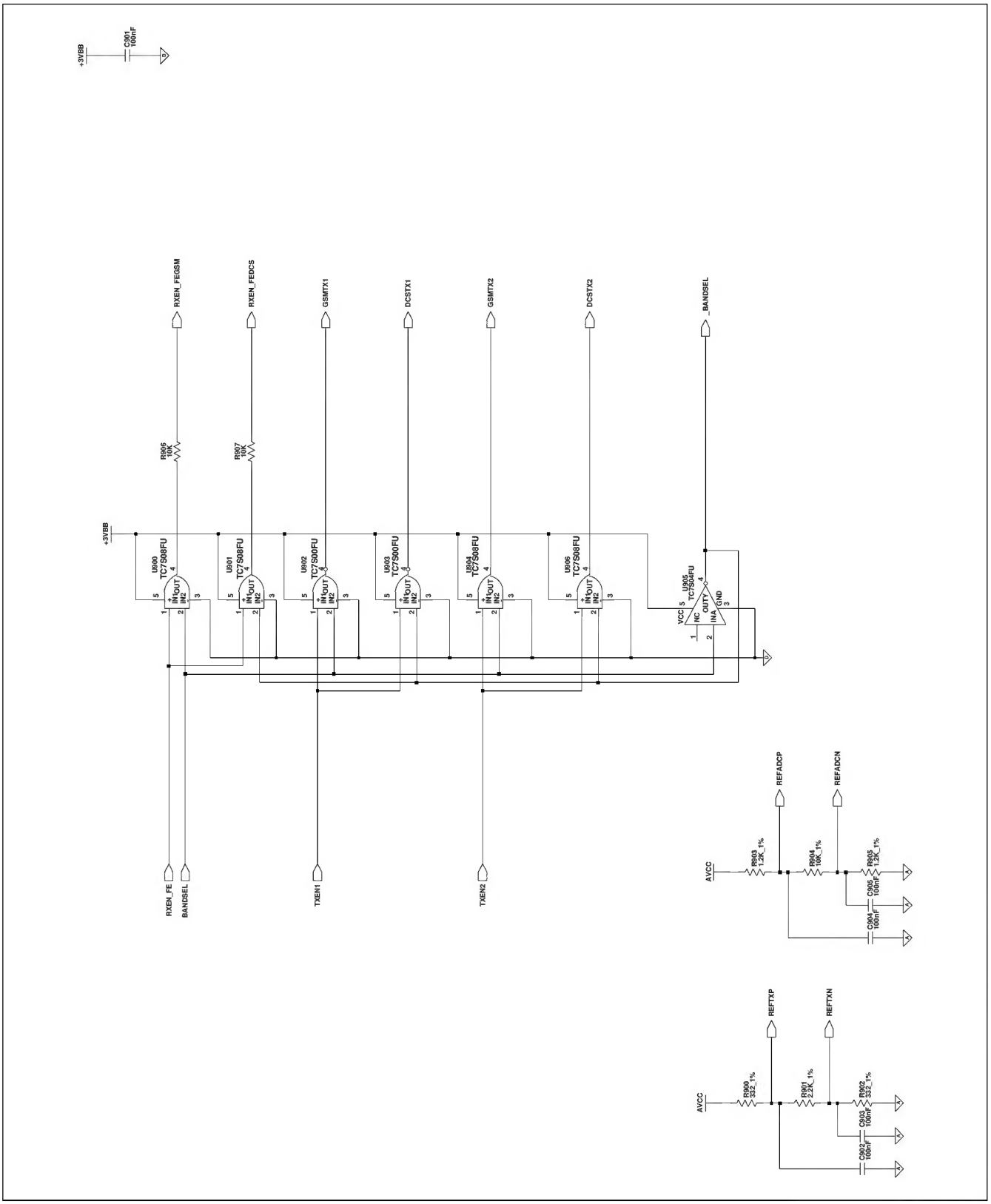


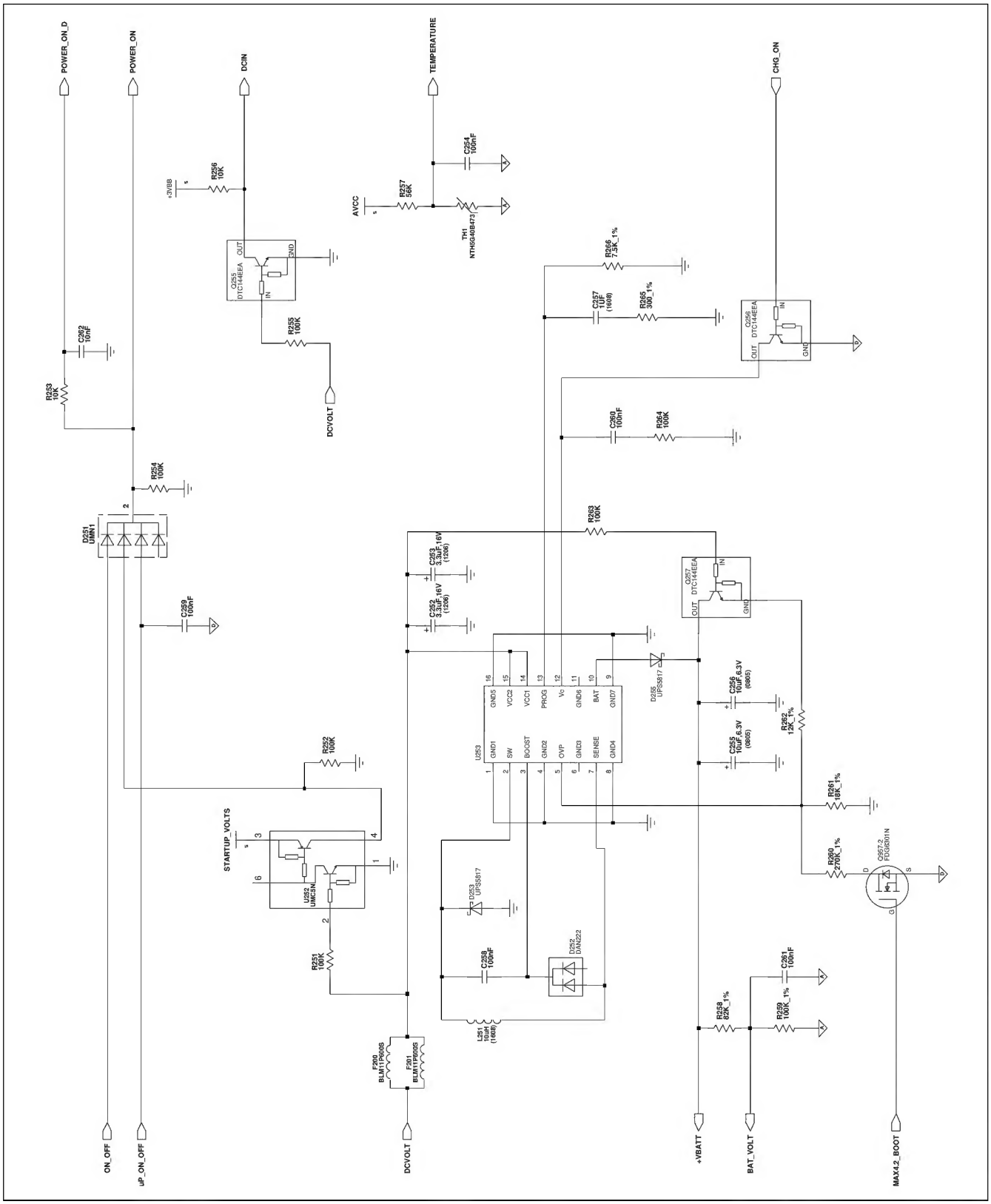

RI_LIGHT
Q153
DTC114EETL
IN
GND
OUT
+VBATT
R163
100
LED100
CL-190YG-CD-T
C165, C166, C167, C168 changed to 6.8nF
+3VBB
D(8:15)
LCD WR
LCD_A2
-RESET
LCD EN
+VBATT
BACKLIGHT
R160
1K
R162
4.7K
Q152
2SD2114KT146
R113
47
C165 47nF
C166 47nF
C167 100nF
C168 100nF
C169 220nF (NM3)
C170 2.2uF (0805)
C171 2.2uF (0805)
C172 2.2uF (0805)
C173 2.2uF (0805)
LCD CONNECTOR
(IAC-11B02)
ON_OFF
R151
100K
Q151
DTC114EETL
R152
10K
KEYBOARD_ROW(0)
KEYBOARD_ROW(1)
KEYBOARD_ROW(2)
KEYBOARD_ROW(3)
KEYBOARD_ROW(4)
BUZ-
BUZ+
MIC-
MIC+
SPK+
SPK-
REED
R153
100K
KEYBOARD_COL(0)
KEYBOARD_COL(1)
KEYBOARD_COL(2)
KEYBOARD_COL(3)
KEYBOARD_COL(4)
STARTUP_VOLTS
MMI INTERFACE CONNECTOR
(AXN6638)
METAL SHIELD

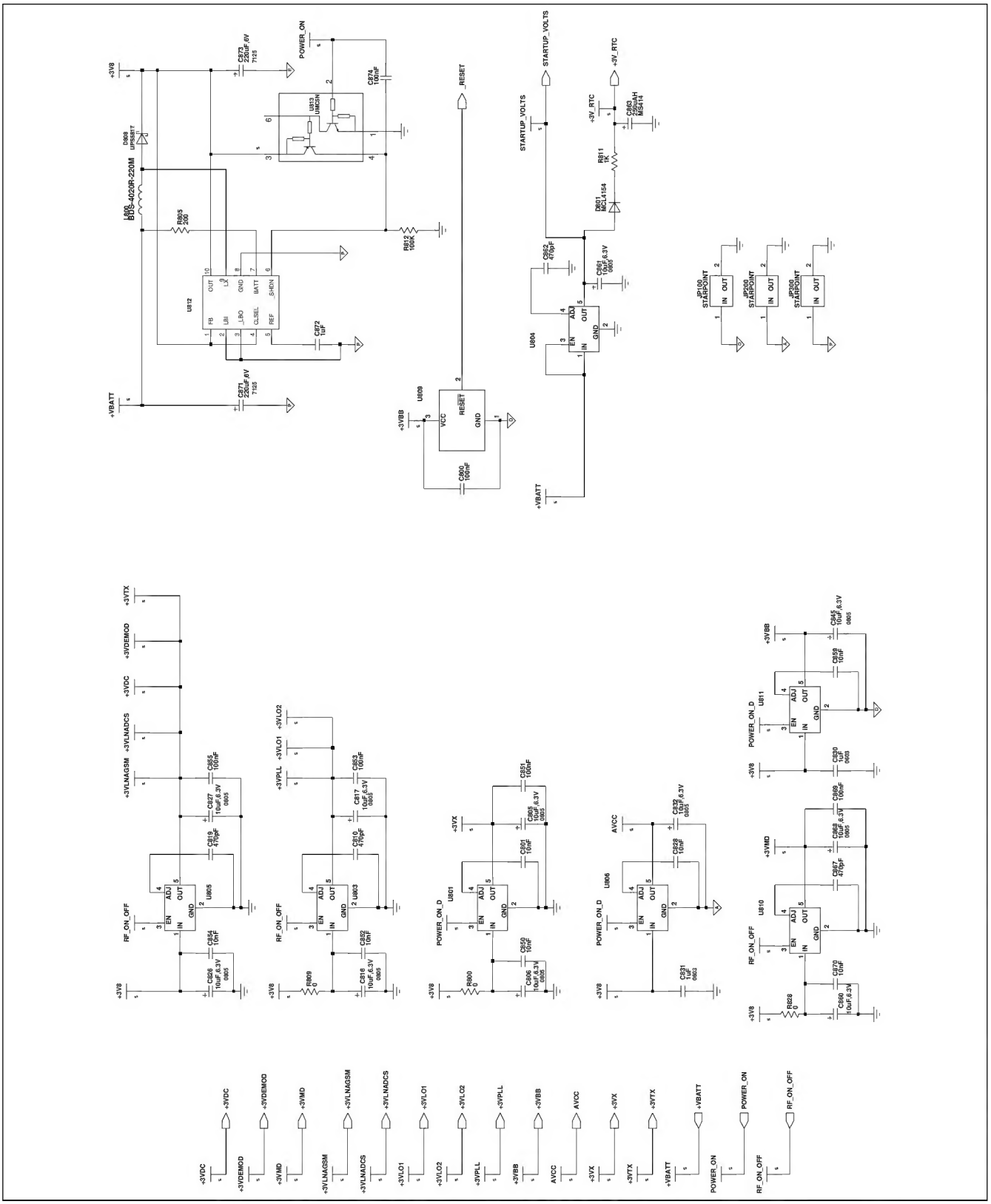
5-12 Kernel




AVCC
BBFILTEN
DEMODEN
IRXP
VMID
QRXP
U127-E OPAMP
U127-A OPAMP
U127-C OPAMP
U127-B OPAMP
U127-D OPAMP
KIRX
KIRX1
KQRX
KQRX1


+3VBB
C901 100nF
RXEN_FEGSM
RXEN_FEDCS
GSMTX1
DCSTX1
GSMTX2
DCSTX2
_BANDSEL
R906 10K
R907 10K
U900 TC7S08FU
U901 TC7S08FU
U902 TC7S00FU
U903 TC7S00FU
U904 TC7S08FU
U906 TC7S08FU
U905 TC7S04FU
VCC NC OUTY INA GND
RXEN_FE
BANDSEL
TXEN1
TXEN2
REFADCP
REFADCN
AVCC
R903 1.2K_1%
R904 10K_1%
R905 1.2K_1%
C905 100nF
C904 100nF
REFTXP
REFTXN
R900 332_1%
R901 2.2K_1%
R902 332_1%
C903 100nF
C902 100nF


POWER_ON_D
POWER_ON
DCIN
TEMPERATURE
CHG_ON
+3V8B
AVCC
R256 10K
R257 56K
C254 100nF
TH1 NTHG5458473
Q256 DTC144EEA
R255 100K
DCVOLT
C262 10nF
R253 100K
R254 100K
D251 UMN1
C259 100nF
R316 7.5K_1%
C257 1UF (1608)
R265 300_1%
C256 DTC144EEA
C260 100nF
R264 100K
R263 100K
C263 2.2UF 16V (1206)
C264 2.2UF 16V (1206)
Q257 DTC144EEA
D255 UPS5817
U253
GND5 GND1 SW VCC2 BOOST VCC1 GND2 PROG3 OVP Vc GND3 GND6 SENSE BAT GND4 GND7
C262 10UF 6.3V (0805)
C265 10UF 6.3V (0805)
R262 12K_1%
R261 18K_1%
R260 270K_1%
Q8572 FDG8301N
R252 100K
STARTUP_VOLTS
U252 UMC5N
R251 100K
D253 UPS5817
D252 DAN222
C258 100nF
L251 10uH (1608)
C261 100nF
R258 82K_1%
R259 100K_1%
F200 BLM11P600S
F201 BLM11P600S
ON_OFF
uP_ON_OFF
DCVOLT
+VBATT
BAT_VOLT
MAX4-2_BOOT


+3VDC
+3VDEMOD
+3VMD
+3VLNAGSM
+3VLNADCS
+3VLO1
+3VLO2
+3VPLL
+3VBB
AVCC
+3VX
+3VTX
+VBATT
POWER_ON
RF_ON_OFF
STARTUP_VOLTS
+3V_RTC
RESET